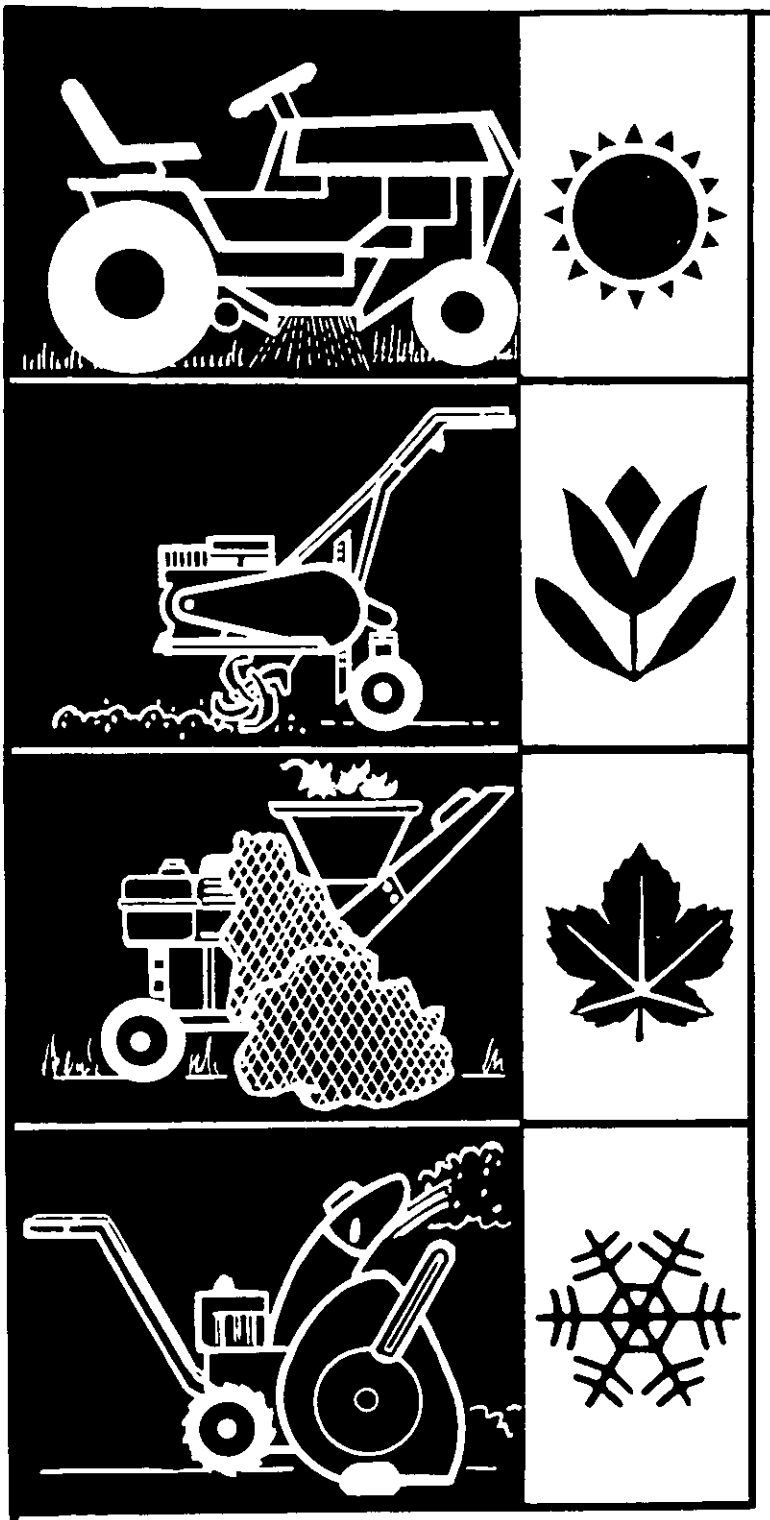

OWNER'S MANUAL

YaRD-MaN

38″ LAWN TRACTOR

Model Number 13698U

Important:

Read Safety Rules and Instructions Carefully

Thank you for purchasing an American built product.

PRINTED IN U.S.A.

FORM NO. 770-2563

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LIMITED WARRANTY

For two years from the date of original retail purchase, YARD-MAN COMPANY will either repair or replace, at its option, free of charge, F.O.B. factory or authorized service firm, any part or parts found to be defective in material or workmanship. Transportation charges for the movement of any power equipment unit or attachment are the responsibility of the purchaser. Transportation charges for any parts submitted for replacement under this warranty must be paid by the purchaser unless such return is requested by YARD-MAN COMPANY.

This warranty will not apply to any part which has become inoperative due to misuse, excessive use, accident, neglect, improper maintenance, alterations, or unless the unit has been operated and maintained in accordance with the instructions furnished. This warranty does not apply to the engine, Peerless components, the motor, battery, battery charger or component parts thereof. Please refer to the applicable manufacturer's warranty on these items.

Warranty on units used commercially is limited to sixty (60) days.

Warranty service is available through your local authorized service dealer or distributor. If you do not know the dealer or distributor in your area, please write to the Customer Service Department of YARD-MAN.

The return of a complete unit will not be accepted by the factory unless prior written permission has been extended by YARD-MAN.

This warranty gives you specific legal rights. You may also have other rights which vary from state to state.

This unit is equipped with an internal combustion engine and should not be used on or near any unimproved forest-covered, brush-covered or grass-covered land unless the engine's exhaust system is equipped with a spark arrester meeting applicable local or state laws (if any). If a spark arrester is used, it should be maintained in effective working order by the operator.

In the State of California the above is required by law (Section 4442 of the California Public Resources Code). Other states may have similar laws. Federal laws apply on federal lands. A spark arrester muffler is available at your nearest engine authorized service center.

WARNING

To reduce the potential for any injury, comply with the following safety instructions. Failure to comply with the instructions may result in personal injury.

SAFE OPERATION PRACTICES FOR RIDING VEHICLES

1. Read this owner's manual carefully in its entirety before attempting to assemble or operate this unit. Keep this manual in a safe place for future and regular reference and for ordering replacement parts.
2. This unit is a precision piece of power equipment, not a plaything. Therefore exercise extreme caution at all times.
3. Know the controls and how to stop quickly—READ THIS OWNER'S MANUAL.
4. Do not allow children to operate vehicle. Do not allow adults to operate it without proper instruction. Only persons well acquainted with these rules of safe operation should be allowed to use your mower.
5. No one should operate this unit while intoxicated or while taking medication that impairs the senses or reactions.
6. Wear sturdy, rough-soled work shoes and close-fitting slacks and shirts to avoid entanglement in the moving parts. Never operate a unit in bare feet, sandals, or sneakers.
7. To prevent injury, do not carry passengers or give rides. Keep children, pets and bystanders out of the area while mowing. Only the operator should ride on the unit and only ride in the seat.
8. Check overhead clearance carefully before driving under power lines, guy wires, bridges or low hanging tree branches, before entering or leaving buildings, or in any other situation where the operator may be struck or pulled from the unit, which could result in serious injury.
9. To maintain control of the unit and reduce the possibility of upset or collision, operate the tractor smoothly. Avoid erratic operation and excessive speed.
10. Keep the area of operation clear of all persons, particularly small children and pets. Stop engine when they are in the vicinity of your mower. Although the area of operation should be completely cleared of foreign objects, a small object may have been overlooked and could be accidently thrown by the mower in any direction and cause injury.
11. Clear work area of objects which might be picked up and thrown by the mower in any direction and cause injury.
12. Stop the blade(s) when crossing gravel drives, walks or roads.
13. Disengage all attachment clutches and shift into neutral before attempting to start engine.
14. Disengage power to attachment(s) and stop engine before leaving operating position.
15. Do not put hands or feet near or under rotating parts. Keep clear of the discharge opening at all times as the rotating blade(s) can cause injury.
16. Disengage power to attachment(s) and stop engine before making any repairs or adjustments. Disconnect the spark plug wire and keep the wire away from the plug to prevent accidental starting.
17. Before attempting to unclog the mower or discharge chute, stop the engine. The mower blade(s) may continue to rotate for a few seconds after the engine is shut off. Therefore, be sure the blade(s) have stopped completely. Disconnect the spark plug wire and keep the wire away from the plug to prevent accidental starting.
18. Disengage power to attachment(s) when transporting or not in use.
19. Take all possible precautions when leaving vehicle unattended such as disengaging power-take-off, lowering attachments, shifting into neutral, setting parking brake, stopping engine and removing key.
20. Do not stop or start suddenly when going uphill or downhill. Mow up and down face of steep slopes; never across the face. Use extreme caution if it is necessary to drive the tractor up an incline or back the tractor down an incline because the front of the tractor could lift and rapidly flip over backward which could cause serious injury.
21. Reduce speed on slopes and in sharp turns to prevent tipping or loss of control. Always keep the tractor in gear when going down steep hills to take advantage of engine braking action.
22. Stay alert for holes in terrain and other hidden hazards.
23. Use care when pulling loads or using heavy equipment.
    A. Use only approved drawbar hitch points.
    B. Limit loads to those you can safely control.
    C. Do not turn sharply. Use care when backing.
    D. Use counterweight(s) or wheel weights when suggested in owner's manual.
24. Watch out for traffic when crossing or near roadways.
25. When using any attachments, never direct discharge of material toward bystanders nor allow anyone near vehicle while in operation.
26. Handle gasoline with care. It is highly flammable.
    A. Use approved gasoline container.
    B. Never remove cap or add gasoline to a running or hot engine or fill fuel tank indoors. Wipe up spilled gasoline.
    C. Open doors if engine is run in garage. Exhaust fumes are dangerous. Do not run engine indoors.

27. Keep the vehicle and attachments in good operating condition, and keep safety devices in place. Use guards as instructed in operator's manual.
28. Keep all nuts, bolts, and screws tight to be sure the equipment is in safe working condition.
29. Never store the equipment with gasoline in the tank inside a building where fumes may reach an open flame or spark. Allow engine to cool before storing in any enclosure.
30. To reduce fire hazard, keep engine free of grass, leaves or excessive grease.
31. The vehicle and attachments should be stopped and inspected for damage after striking a foreign object. The damage should be repaired before restarting and operating the equipment.
32. Do not change the engine governor settings or overspeed the engine.
33. When using the vehicle with mower, proceed as follows:
    (1) Mow only in daylight or in good artificial light.
    (2) Never make a cutting height adjustment while engine is running if operator must dismount to do so.
    (3) Shut the engine off and wait until the blade comes to a complete stop before removing the grass catcher.
    (4) Check blade mounting bolts for proper tightness at frequent intervals.
34. Check grass catcher bags frequently for wear or deterioration. For safety protection, replace only with new bag meeting original equipment specifications.
35. Look behind to make sure the area is clear before placing the transmission in reverse and continue looking behind while backing up. Disengage blades before shifting into reverse and backing up.
36. This unit should not be driven up a ramp onto a trailer or truck under power, because the unit could tip over, causing serious personal injury. The unit must be pushed manually to load properly.

ASSEMBLY

NOTE

This unit is shipped WITHOUT GASOLINE or OIL. After assembly, see separate engine manual for proper fuel and engine oil recommendations.

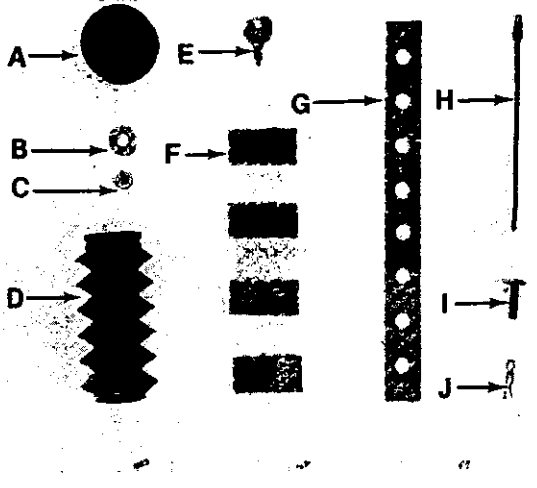


FIGURE 1.

NOTE

Reference to right hand or left hand side of machine is from the driver's seat facing forward.

Contents of Hardware Pack:
(See Figure 1)

- A (1) Steering Wheel Cap
- B (1) Belleville Washer
- C (1) Hex Nut 5/16-18 Thread
- D (1) Steering Bellow
- E (2) Ignition Keys
- F (4) Foam Strips
- G (1) Battery Strap
- H (1) Cable Tie
- I (1) Clevis Pin
- J (1) Hairpin Cotter
- (2) Hex Bolts and Lock Washers (Not Shown)

Loose Parts in Carton:

- (1) Battery Pack
- (1) Steering Wheel
- (1) Seat

BATTERY INFORMATION

WARNING

A. Battery acid must be handled with great care as contact with it can burn and blister the skin. It is also advisable to wear protective clothing (goggles, rubber gloves and apron) when working with it.*

B. Should battery acid accidentally splatter into the eyes or onto the face, rinse the affected area immediately with clean cold water. If there is any further discomfort, seek prompt medical attention.

C. If acid spills on clothing, first dilute it with clean water, then neutralize with a solution of ammonia/water or baking soda/water.

D. Since battery acid is corrosive, do not pour it into any sink or drain. Before discarding empty electrolyte containers, rinse them with a neutralizing solution.

E. NEVER connect or disconnect charger clips to battery while charger is turned on as it can cause sparks.

F. Keep all lighted materials (cigarettes, matches, lighters) away from the battery as the hydrogen gas generated during charging can be combustible.

G. As a further precaution, only charge the battery in a well-ventilated area.

***Always shield eyes, protect skin and clothing when working near batteries.**

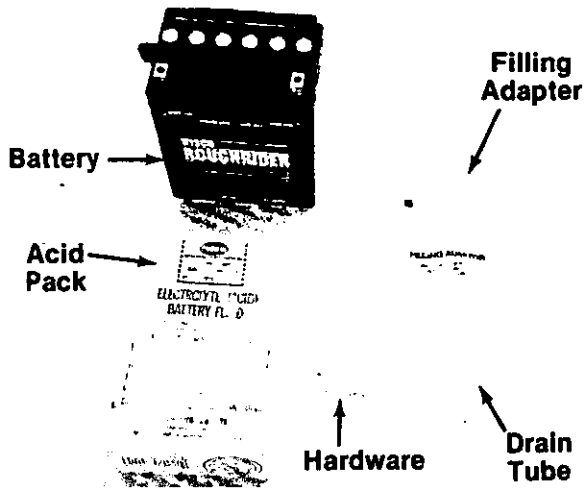


FIGURE 2.

ACTIVATING AND INSTALLING THE BATTERY

1. Upon opening the battery pack, you should receive acid pack, battery, drain tube, filling adapter and hardware. See figure 2.

DANGER

BATTERIES CONTAIN SULFURIC ACID AND MAY CONTAIN EXPLOSIVE GASES (when electrolyte has been added).

2. Place the battery on table or workbench to be filled.

3. Place one end of clear plastic drain tube on manifold of battery. See figure 3.

NOTE

Some batteries may already have the drain tube installed, in which case it may be necessary to snip off the sealed end.

4. Remove the six fill caps from the top of the battery with a screwdriver. Care should be taken not to damage the fill caps. See figure 3.

5. Lay acid package down, with "push in" facing up. Using thumb, push in small perforated tab at dot on front of package. Tear down large tab to solid line, exposing hose. **Do not** use any sharp object to open acid package.

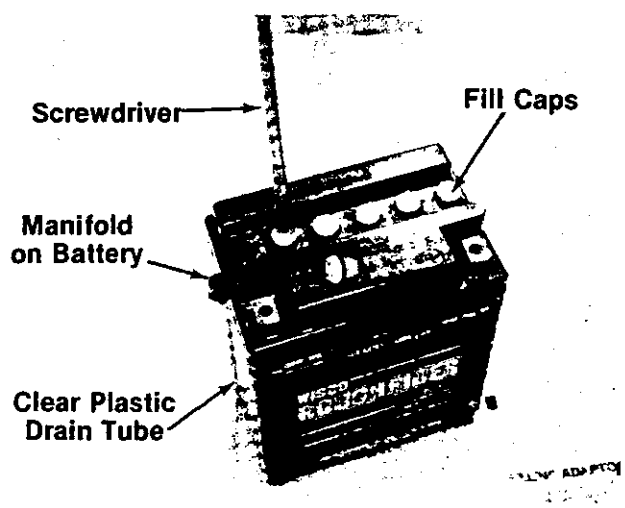


FIGURE 3.

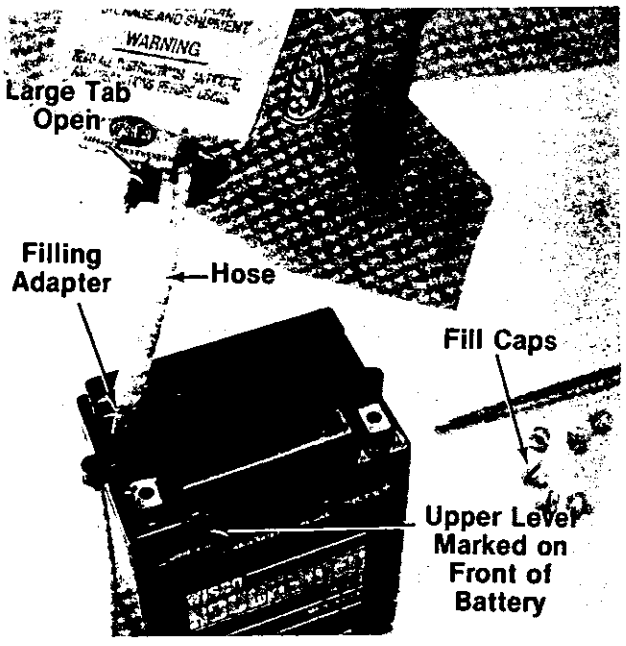


FIGURE 4.

WARNING

Battery contains sulfuric acid. Refer to warning on page 5. Antidote: EXTERNAL—Flush with water. INTERNAL—Drink large quantities of water or milk. Follow with milk of magnesia, beaten egg or vegetable oil. Seek prompt medical attention. EYES: Flush with cool water for at least 15 minutes, then seek immediate medical attention.

Since batteries produce explosive gases, keep all lighted materials (cigarettes, lighters, matches, etc.) away. Be sure to charge battery only in well-ventilated areas.

KEEP BATTERIES
OUT OF THE REACH OF CHILDREN!

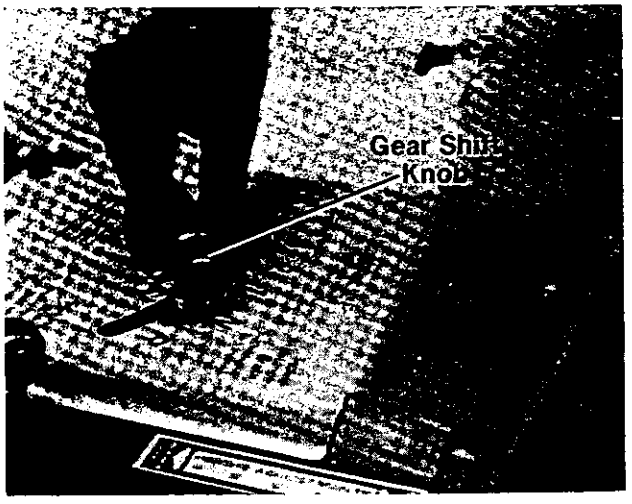


FIGURE 5.

6. Pull out hose from package and hold upright. Squeeze hose forcing all acid back into package. Cut off tip of hose and insert filling adapter. See figure 4.
7. Fill each cell to upper level marked on front of battery. Replace fill caps on battery. See figure 4.
8. Allow battery to sit for 20 to 30 minutes. Add additional acid, if necessary, to bring it up to the proper level.
9. The battery can be charged after the 20 minutes sitting period. SLOW CHARGE THE BATTERY (DO NOT FAST CHARGE) at a maximum bench rate of 1.4 amperes until the specific gravity reading is 1.260-1.280. Charge for a minimum of 2 hours and a maximum of 8 hours.

NOTE

Charging rate after battery has been put into operation: The battery is to be charged for a period of 14-16 hours. NO LONGER THAN 30 HOURS.

CAUTION

After battery has been in service, add only distilled water. DO NOT ADD ACID.

NOTE

This engine is equipped with a dual circuit alternator. The current for the battery charger alternator is unregulated and is rated at 3 amperes at 3600 r.p.m. During normal operation, it is only necessary to charge the battery:

1. When it is activated for the first time.
2. Before winter storage.
3. Before using the lawn tractor after winter storage.

INSTALLING THE BATTERY

1. Place gear shift lever in the "neutral" position. Unscrew the gear shift knob. See figure 5.

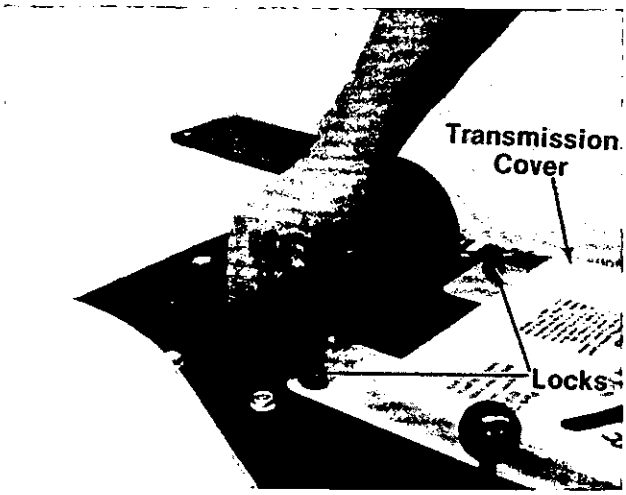


FIGURE 6.

2. Push down and turn the locks on the transmission cover one-quarter turn. See figure 6.

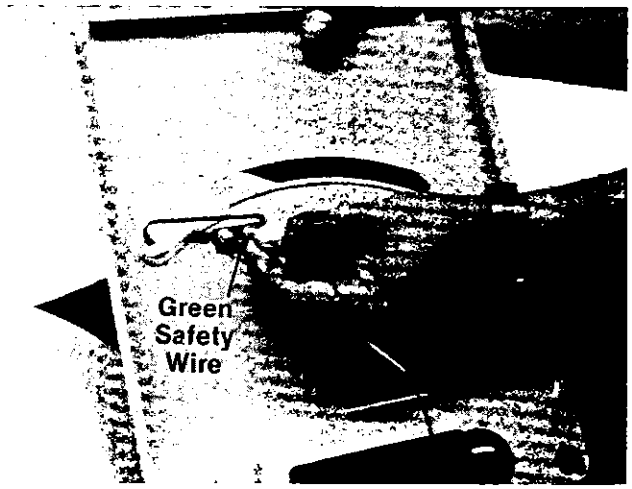


FIGURE 7.

3. Lift the transmission cover. Unplug the green safety wire from beneath the transmission cover. See figure 7. Remove transmission cover.

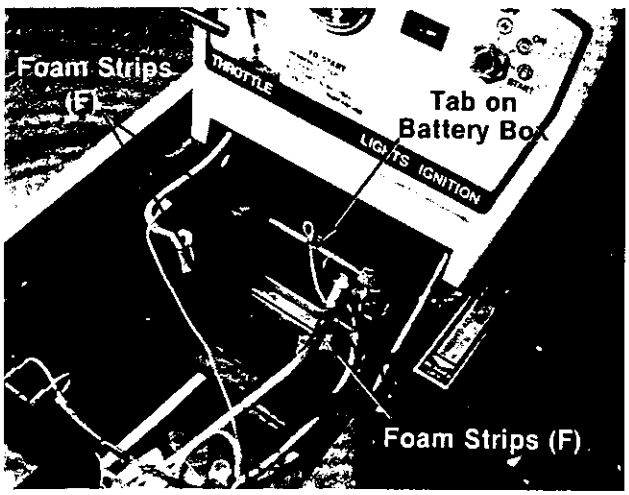


FIGURE 8.

4. Install the four foam strips (F) into the battery box as follows.
   A. Using a cloth, clean the inside of the battery box with a thinner or solvent.
   B. Peel the paper off the foam strips to expose the adhesive backing. Press foam strips firmly into the corners of the battery box. See figure 8.

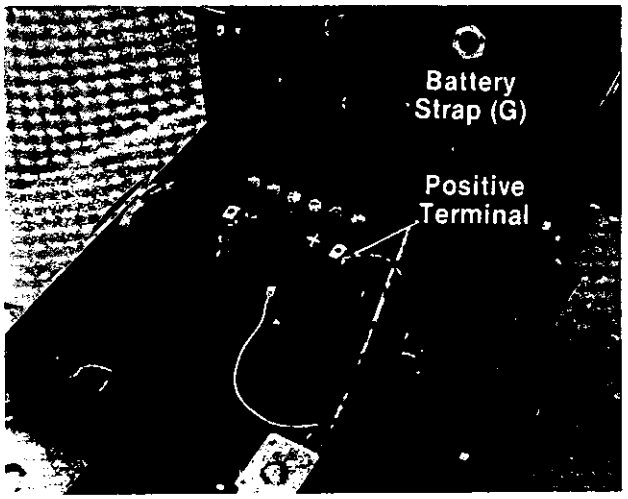


FIGURE 9.

5. Loop one end of battery strap (G) around the tab on battery box shown in figure 8. Hold the battery strap out of the way. Place the battery in the lawn tractor so that the positive terminal is facing the right side of the unit. See figure 9.

NOTE

Right and left hand sides of the unit are determined by sitting on the seat in the operating position, facing forward.

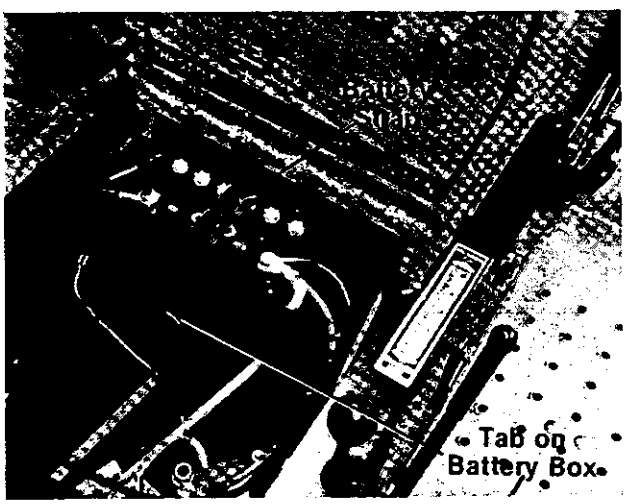


FIGURE 10.

6. Secure the battery to the battery box by stretching the battery strap across the battery. Loop the end around the tab on the side of the battery box. See figure 10.
7. Slide the square nut (provided with battery hardware) into the positive (+) terminal. Place the positive (heavy red wire) cable and the small red wire on the positive terminal. Secure with screw and lock washer provided. See figure 10.
8. Slide the square nut (provided with battery hardware) into the negative (−) terminal. Place the negative (heavy red wire) cable on the negative terminal. Secure with screw and lock washer provided.

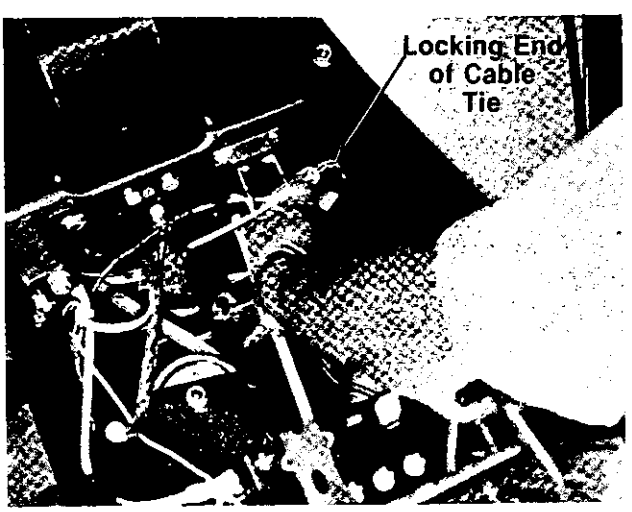


FIGURE 11.

9. Attach the battery drain tube to the manifold of the battery, on the left hand side. Push the locking end of cable tie (H) through the hole in the left frame as shown in figure 11. Route the battery drain tube back to the cable tie. Place end of cable tie through the slot so a loop is formed around the drain tube to secure it. Tighten cable tie and cut off excess end.
10. Plug the green safety wire into the switch beneath the transmission cover. Refer to figure 7. Replace the transmission cover and gear shift knob.

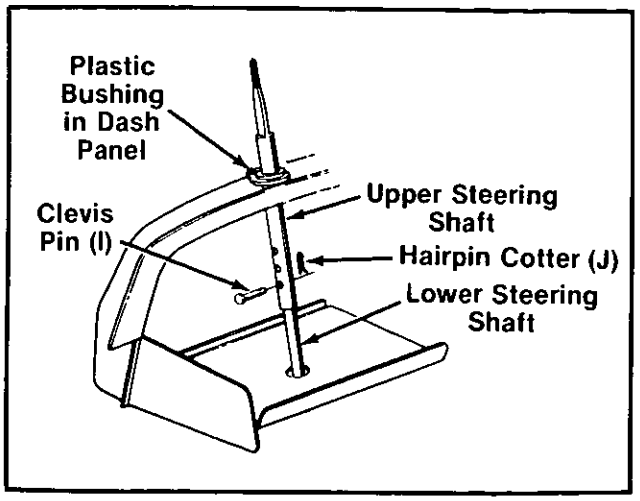


FIGURE 12.

STEERING WHEEL INSTALLATION

1. For shipping purposes, the upper steering shaft is pushed all the way down over the lower steering shaft. Pull the upper steering shaft up. The three holes in the shaft provide three steering wheel heights. Select desired hole and secure with clevis pin (I) and hairpin cotter (J). See figure 12.

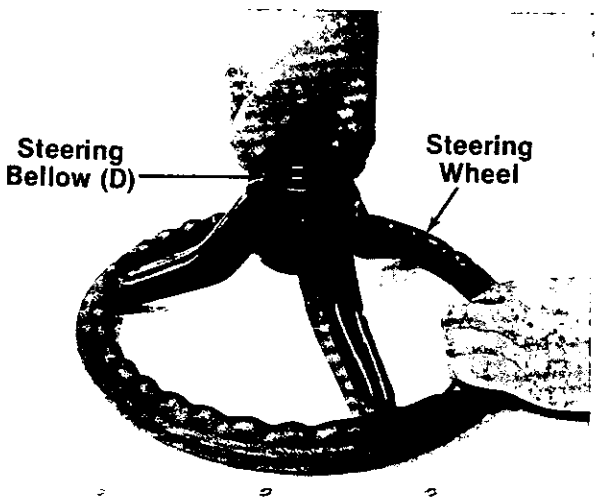


FIGURE 13.

2. Attach steering bellow (D) to the steering wheel as shown in figure 13.

NOTE

One end of the steering bellow is slightly larger than the other. The larger end must be assembled to the steering wheel.

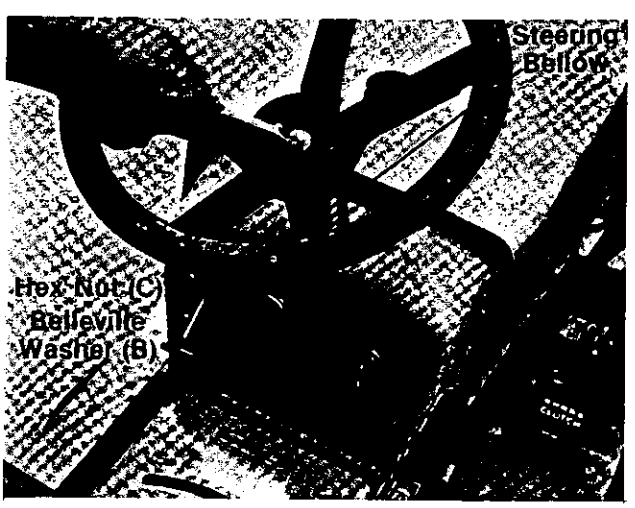


FIGURE 14.

3. Place steering wheel and bellow on the steering shaft, lining up the flats in the wheel with the flats on the shaft.
4. Secure with belleville washer (B) (cupped side against the steering wheel) and hex nut (C). See figure 14.
5. Press the steering wheel cap (A) on the steering wheel by hand.

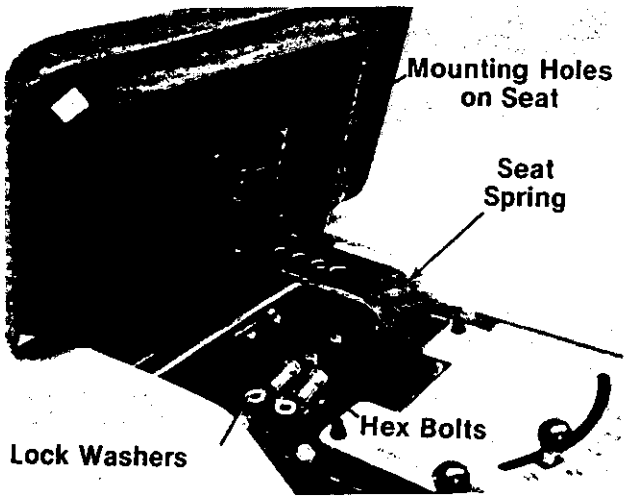


FIGURE 15.

SEAT INSTALLATION

The seat may be adjusted to three different positions. Select desired position and secure to seat spring with two hex bolts and lock washers. See figure 15.

CONTROLS

THROTTLE CONTROL

The throttle control is used to regulate the engine speed and to activate the choke on the engine. To get maximum efficiency from cutting, the throttle should be in the FAST position when operating the mower. Pushing the throttle all the way forward past FAST, will choke the engine. See figure 16.

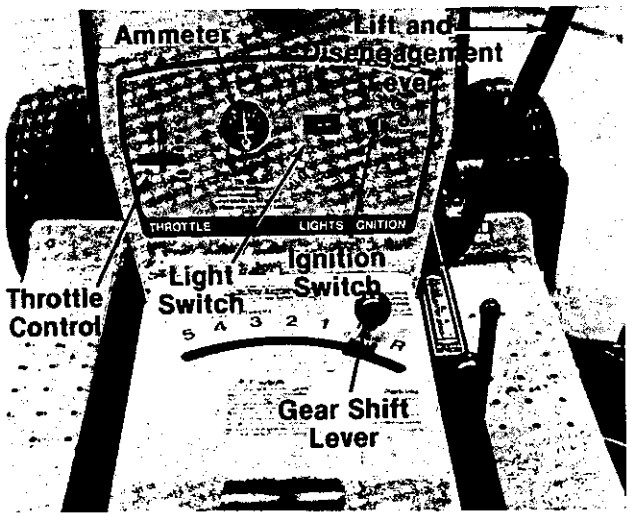


FIGURE 16.

GEAR SHIFT LEVER

The gear shift lever is used to shift into one of the Forward Gears, "NEUTRAL" or "REVERSE."

IGNITION SWITCH

Turn the key to the "START" position to start the engine. When the engine is running, let the key return to the "ON" position. To stop the engine, turn the key to the left to the "OFF" position and remove it to prevent accidental starting. See figure 16.

LIGHT SWITCH

Push the light switch to turn on the lights. The lights will only operate when the engine is running. See figure 16.

AMMETER

The ammeter registers the rate of battery charge or discharge. The ammeter should register on the plus side (+) when the engine is running in the fast position until the battery is completely charged. With a fully charged battery or with the engine idling, the ammeter will not show a charge. See figure 16.

CLUTCH-BRAKE PEDAL

The clutch-brake pedal is located on the right side of the lawn tractor. Depressing the clutch-brake pedal part way disengages the clutch. Pressing the pedal all the way down disengages the clutch and engages the disc brake. See figure 17.

NOTE

The clutch-brake pedal must be depressed to start the engine.

PARKING BRAKE

To set the parking brake, depress the clutch-brake pedal and press the parking brake knob down. To release the parking brake, depress and release the clutch-brake pedal. See figure 17.

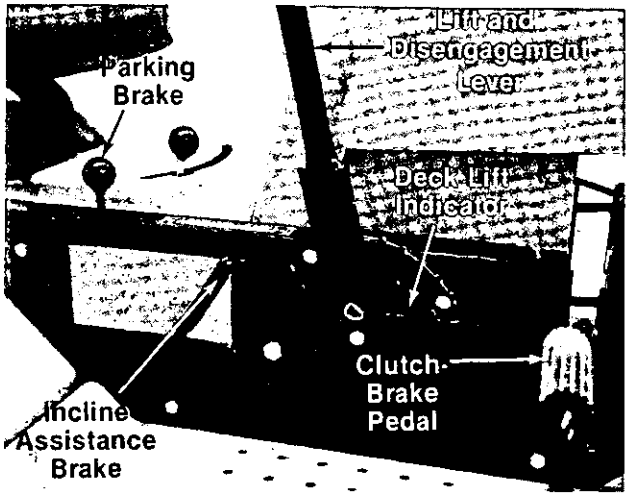


FIGURE 17.

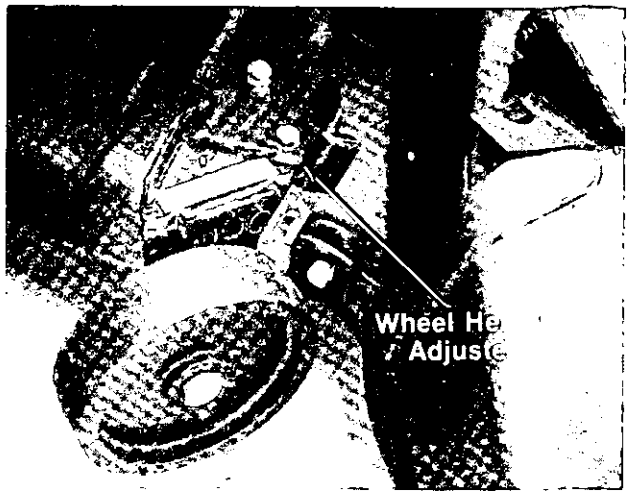


FIGURE 18.

INCLINE ASSISTANCE BRAKE

When stopping on a hill, hold the incline assistance brake lever back while you release the clutch-brake pedal until the lawn tractor begins to move, then release the lever. This lever permits smoother starts and clutch engagement by holding the tractor during the brake release/clutch engagement operation. See figure 17.

INTERLOCKS (Not Shown)

Interlock safety switches are located on the clutch-brake pedal, and the lift and disengagement lever and gear shift lever.

Before the engine will start, the clutch-brake pedal must be depressed all the way and the lift and disengagement lever must be in the disengaged position.

Before the unit can be shifted into reverse, the lift and disengagement must be in the disengaged position.

CUTTING CONTROLS

A. LIFT AND DISENGAGEMENT LEVER

The lift and disengagement lever is used to raise and lower the cutting deck. Pulling it all the way back and locking it disengages the blades. The lift and disengagement lever **must** be in the disengaged position when starting the engine and when shifting into reverse. See figure 16.

B. DECK LIFT INDICATOR

The deck lift indicator marks the position being used for the lift lever. Select the lift lever position desired, press the indicator lever outward, move it to the position immediately below the lift lever and release the indicator lever. See figure 17.

C. WHEEL HEIGHT ADJUSTER

Move the lever towards the wheel and set it in the desired height. See figure 18.

D. SETTING THE CUTTING HEIGHT

1. Select the position for the lift lever which gives the desired cutting height. Move the deck lift indicator so that the lift lever can be returned to the same position after it is raised.
2. Set the wheel height adjusters on the deck so that the wheels are ¼ to ½ inch above the ground.

OPERATION

CAUTION

1. Keep all shields in place.
2. Before leaving operator's position:
   a. Shift transmission to neutral
   b. Set parking brake
   c. Disengage attachment clutch
   d. Shut off engine
   e. Remove ignition key
3. Wait for all movement to stop before servicing machine.
4. Keep people and pets a safe distance away from machine.
5. Look to the rear before backing up.

TIRE PRESSURE

For shipping purposes, the tires on your unit may be over-inflated. Tire pressure should be reduced before unit is put into operation. Pressure should be approximately 15 p.s.i. Equal tire pressure should be maintained on all tires. Maximum tire pressure is 30 p.s.i.

STARTING THE ENGINE

NOTE

To open the hood, simply lift up on both sides of the hood.

1. Service the engine with oil and gasoline as described in the engine manual.
2. Open the fuel shut-off valve (turn counter-clockwise). See figure 19.

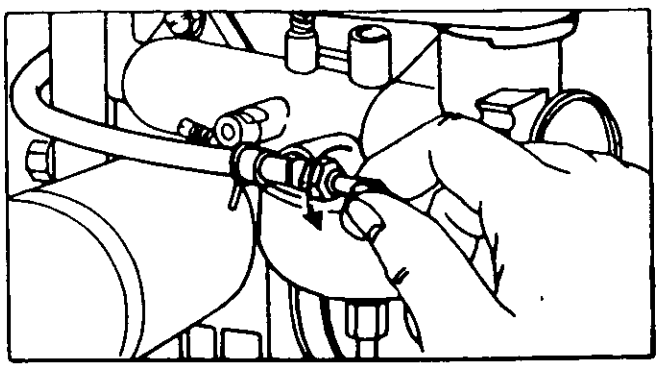


FIGURE 19. FUEL SHUT-OFF VALVE

3. Depress the clutch-brake pedal and set the parking brake. See figure 17.
4. Place the lift and disengagement lever in the DISENGAGED position. See figure 17.

NOTE

This unit is equipped with a safety interlock system for your protection. The purpose of the safety interlock system is to prevent the engine from cranking or starting unless the clutch-brake pedal is depressed and the lift and disengagement lever is in the disengaged position. In addition, the lift and disengagement lever must be in the disengaged position when the unit is put into reverse or the engine will shut off.

WARNING

Do not operate the lawn tractor if the interlock system is malfunctioning because it is a safety device, designed for protection.

5. Set the throttle control in the CHOKE position. See figure 16.
6. Turn the ignition key to the "START" position. When the engine is running, let the key return to the "ON" position. See figure 16.
7. Move the throttle control lever to desired engine speed.

STOPPING THE ENGINE

Turn the ignition key to the left to the "OFF" position. Remove the key to prevent accidental starting.

NOTE

A brief break-in period is essential to ensure maximum engine and mower life. The break-in consists of running the engine at half speed for a period of time required to use one tank of gasoline. It is also recommended to change crankcase oil after the first 5 hours of operation.

IMPORTANT

If you strike a foreign object, stop the engine. Remove wire from spark plug, thoroughly inspect the unit for any damage, and repair the damage before restarting and operating the mower.

OPERATING THE MOWER

1. Set the desired cutting height.
2. Start the engine as instructed on page 11.
3. Move throttle control to desired engine speed.
4. Depress the clutch-brake pedal and shift into first gear or reverse.
5. Release clutch-brake pedal slowly to put unit into motion.
6. Depress the clutch-brake pedal when shifting gears.

NOTE

Do **not** force the gear shift lever!

7. The lawn tractor is brought to a stop by depressing the clutch-brake pedal. The drive belt will be disengaged and the brake will be applied.

CAUTION

If the unit is not to be used for a long period, place the gear shift lever in NEUTRAL, stop the engine, set the parking break and remove the key. DO NOT leave the machine on an incline.

OPERATING THE CUTTING BLADES

The cutting blades may be engaged while the lawn tractor is moving or standing still. DO NOT engage the cutting blades abruptly as the sudden belt tension on the pulley may cause the engine to stall.

WARNING

When the blade drive is engaged, keep feet and hands away from the discharge opening, the blades or any part of the deck.

Move the lift and disengagement lever into the DISENGAGED position to raise the deck and disengage the blades.

NOTE

When the machine is used for other than mowing operations, the blade drive should be disengaged.

GRASS CATCHER Model 015 is available as optional equipment for the lawn tractor shown in this manual.

WARNING

The mower should not be operated without the entire grass catcher or chute deflector in place.

NOTE

Under normal usage bag material is subject to wear, and should be checked periodically. Be sure any replacement bag complies with the mower manufacturer's recommendations.

For replacement bags, use only factory authorized replacement bag No. 764-0121.

ADJUSTMENTS

SEAT ADJUSTMENT

The seat may be adjusted to one of several positions. Refer to seat installation section of assembly instructions.

STEERING WHEEL ADJUSTMENT

There are three height positions for the steering wheel. To adjust the height of the steering wheel, remove the hairpin cotter and clevis pin shown in figure 20. Place the steering wheel in the position desired and secure with hairpin cotter and clevis pin.

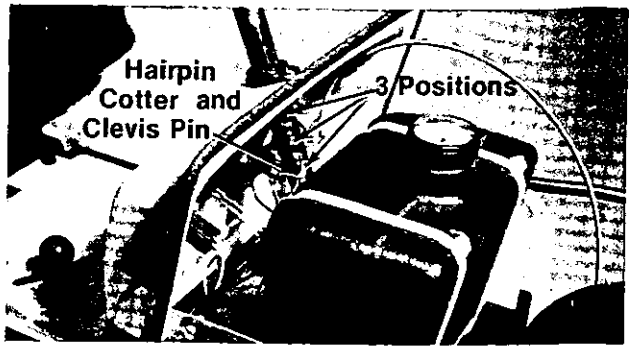


FIGURE 20.

WHEEL ADJUSTMENT

The caster (forward slant of the king pin) and the camber (tilt of the wheels out at the top) require no adjustment. Automotive steering principles have been used to determine the caster and camber on the tractor. The front wheels should toe-in 1/8 inch.

To adjust the toe-in, follow these steps.

1. Remove the hex nut and lock washer, and drop the tie rod end from the wheel bracket. See figure 21.

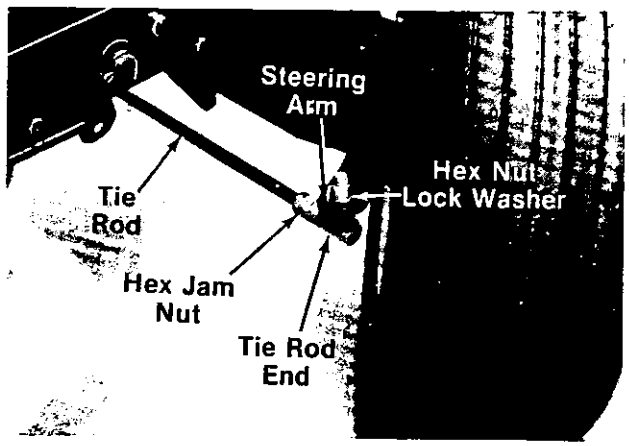


FIGURE 21.

2. Loosen the hex jam nut on tie rod.
3. Adjust the tie rod assembly for correct toe-in.

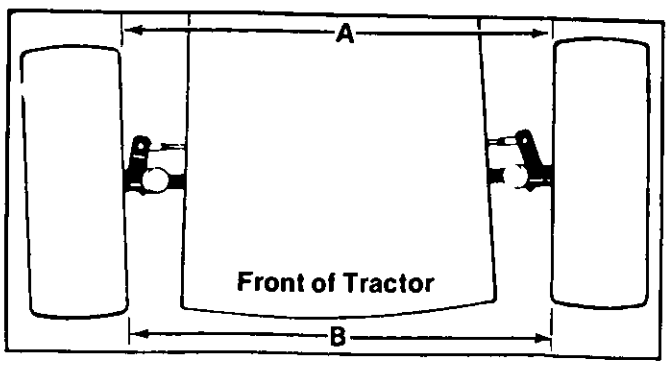


FIGURE 22. TOE-IN DIAGRAM

Dimension "B" should be approximately 1/8" less than Dimension "A." See figure 22.

A.) To increase Dimension "B," screw tie rod into tie rod end.

B.) To decrease Dimension "B," unscrew tie rod from tie rod end.

C.) Reassemble tie rod. Check dimensions. Readjust if necessary.

CARBURETOR ADJUSTMENT

WARNING

If any adjustments are made to the engine while the engine is running (e.g. carburetor), disengage all clutches and blades. Keep clear of all moving parts. Be careful of heated surfaces and muffler.

Minor carburetor adjustment may be required to compensate for differences in fuel, temperature, altitude and load. To adjust the carburetor, refer to the separate engine manual packed with your unit.

BRAKE ADJUSTMENT

During normal operation of this machine, the brake is subject to wear and will require periodic examination and adjustment.

CAUTION

Do not have the engine running when you adjust the brake.

To adjust the brake, proceed as follows.

1. Tighten the inside nut until the cam lever can not be moved by hand.
2. Loosen the inside nut until the cam lever can be pushed forward so that there is a 1/8" to 3/16" space between the cam lever and stop bolt. See figure 23.

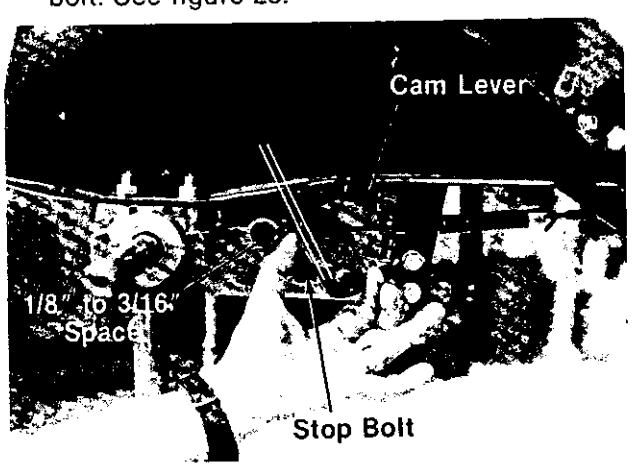


FIGURE 23.

3. Tighten the outside nut against the inside nut, using two ½" wrenches. See figure 24.

NOTE

Friction pads must be replaced when the inside of cam lever touches the housing.

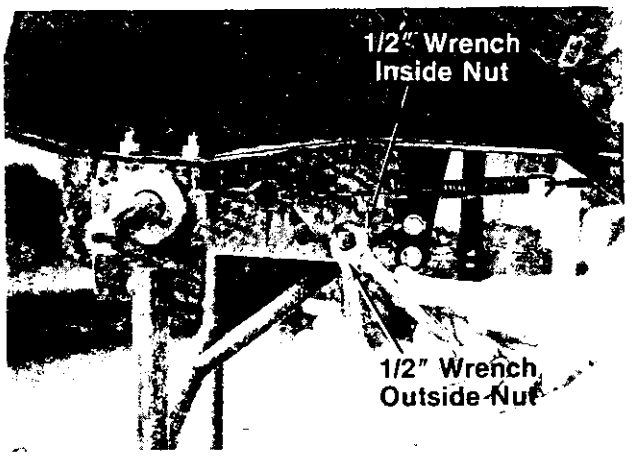


FIGURE 24.

LUBRICATION

STEERING GEARS

Lubricate teeth of steering gears with automotive multi-purpose grease after every 25 hours of operation or once a season. See figure 25.

STEERING SHAFT

Lubricate steering shaft at least once a season with light oil.

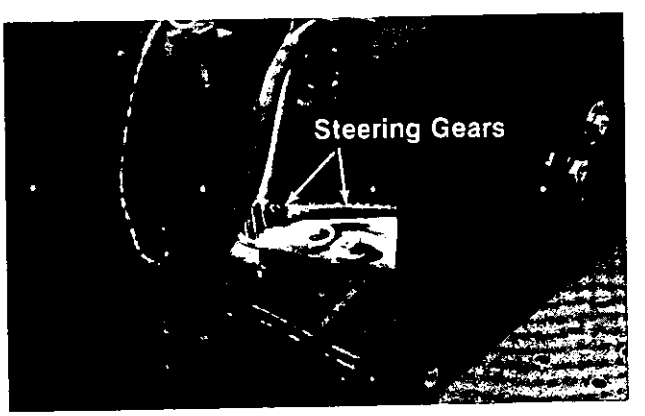


FIGURE 25.

TRANSAXLE

The transaxle is lubricated and sealed at the factory and does not require checking. If disassembled for any reason, lubricate with 24 oz. of E.P. Lithium grease.

PIVOT POINTS

Lubricate all pivot points with light oil at least once a season.

MAINTENANCE

Disconnect the spark plug wire and ground against the engine before performing any repairs or maintenance.

CRANKCASE OIL

Check the oil level in the crankcase before each use of the machine and after every five hours of operation. Oil level should be maintained as instructed in the separate engine manual.

After the first five hours of operating a new engine, drain the oil from the crankcase while engine is still hot and refill crankcase with new oil; thereafter change the oil every 25 hours of operation. Refer to the engine manual.

AIR CLEANER

Under normal operating conditions, the air cleaner, located on top of the carburetor, must be serviced after every ten hours of use. Under extremely dusty operating conditions, the air cleaner must be serviced after every hour of operation. To service the air cleaner, refer to the separate engine manual packed with your unit.

CLEANING ENGINE AND BLADE HOUSING

Any fuel or oil spilled on the machine should be wiped off promptly. Grass, leaves, and other dirt must not be left to accumulate around the cooling fins of the engine or on any part of the machine.

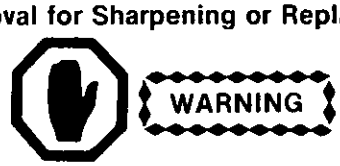
Clean the underside of the blade housing after each mowing.

SPARK PLUG

The spark plug should be cleaned and the gap reset once a season. Spark plug replacement is recommended at the start of each mowing season; check engine manual for correct plug type and gap specification.

CUTTING BLADE

A. Removal for Sharpening or Replacement



Be sure to disconnect and ground the spark plug wire and remove ignition key before working on the cutting blade to prevent accidental engine starting.

1. Remove the large bolt and lock washer which holds the blade and adapter to the blade spindle.
2. Remove the blade and adapter from the spindle. Be careful not to lose the key on the spindle.
3. If the blade or blade adapter needs replacing, remove the two small bolts, lock washers and nuts which hold the blade to the adapter.

B. Sharpening

Remove the cutting blade by following the directions of the preceding section.

When sharpening the blade, follow the original angle of grind as a guide. It is **extremely important** that each cutting edge receives an equal amount of grinding to prevent an unbalanced blade. An unbalanced blade will cause excessive vibration when rotating at high speeds, may cause damage to the mower and could break, causing personal injury.

The blade can be tested for balance by balancing it on a round shaft screwdriver. Remove metal from the heavy side until it balances evenly.

It is recommended that the blade always be removed from the adapter for the best test of balance.

C. Reassembly

Before reassembling the blade and the blade adapter to the unit, lubricate the spindle and the inner surface of the blade adapter with light oil. Lubricating the bolt holes, bolts and inner surface of the nuts with light oil is also recommended. A 4 oz. plastic bottle of light oil lubricant is available. Order part number 737-0170. Engine oil may also be used.

When replacing the blade, be sure to install the blade with the side of the blade marked "Bottom" (or with part number) facing the ground when the mower is in the operating position. Make certain key is in place on the crankshaft.

Blade Mounting Torque

3/8" Dia. Bolt 375 in. lb. min., 450 in. lb. max.
5/16" Dia. Bolt 150 in. lb. min., 250 in. lb. max.

To insure safe operation of your unit, ALL nuts and bolts must be checked periodically for correct tightness.

BELT REMOVAL AND REPLACEMENT

Do not use an off-the-shelf belt. If belt replacement is required, order belt or belts by part number from your nearest authorized dealer.

NOTE

Figures 26 through 30 were photographed with the unit tipped up for clarity. It is not necessary to tip the unit to remove the belts.

Removing the Deck Belt

1. Place the lift lever in the disengaged position.
2. Remove the two J-bolts (belt keepers) from the engine pulley belt guard. See figure 26.

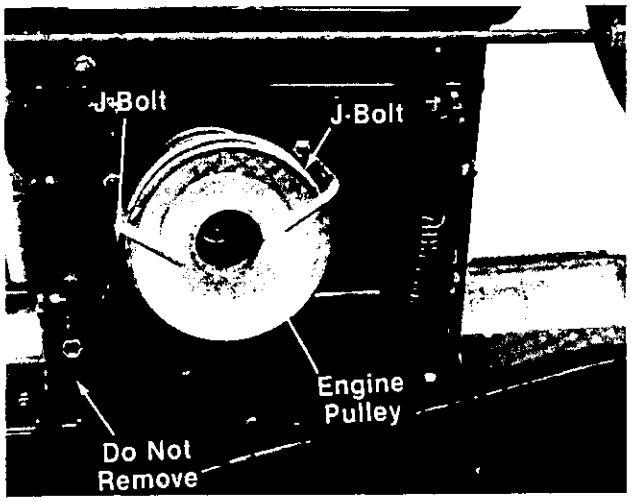


FIGURE 26.

3. Unhook the deck belt from the engine pulley.
4. Place the lift lever in the engaged (all the way forward) position.
5. Disconnect the six deck links by removing the hairpin cotters and flat washers. See figure 27.

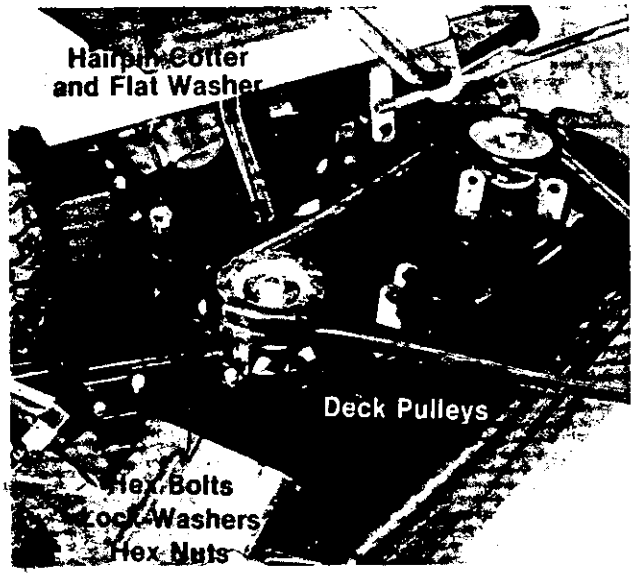


FIGURE 27.

6. Slide the deck from beneath the lawn tractor.
7. Remove the belt guards at each deck pulley by removing the hex bolts, lock washers and hex nuts. See figure 27.
8. Remove and replace the belt, following the instructions in reverse order.

Removing the Drive Belt

1. Follow steps 1 through 3 on removing the deck belt.
2. Remove the two bolts, lock washers and nuts on each side of the frame which hold the engine pulley belt guard to the frame. See figure 28.

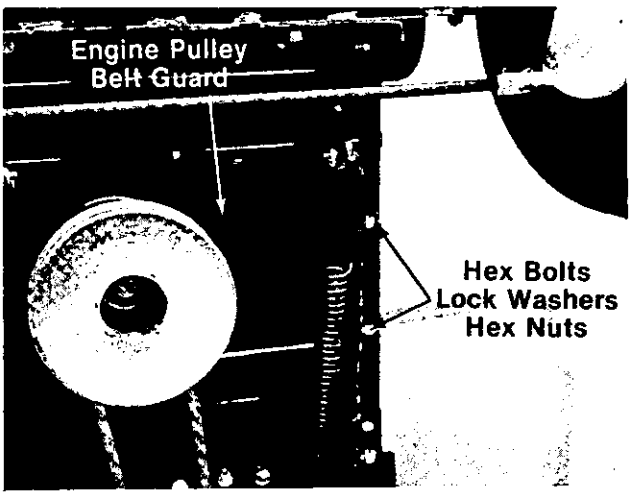


FIGURE 28.

3. Remove the engine pulley belt guard by slipping it back and to the right. See figure 29.

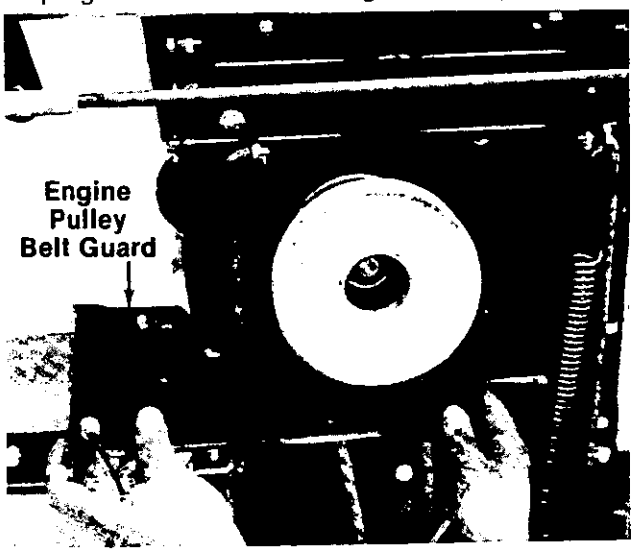


FIGURE 29.

4. Remove the bolt, lock washer and nut which hold the idler pulley to the idler bracket. See figure 30.

NOTE

Upon reassembly, the hub side of the idler pulley must be assembled against the idler bracket.

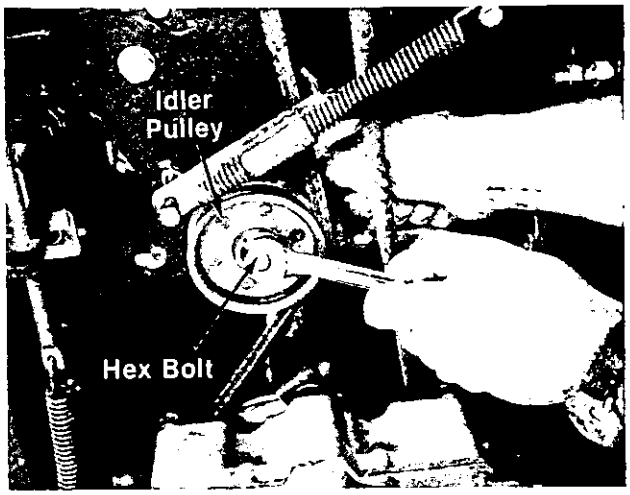


FIGURE 30.

5. Remove two self-tapping screws which hold the transaxle belt guard to the top of the transaxle. See figure 31.

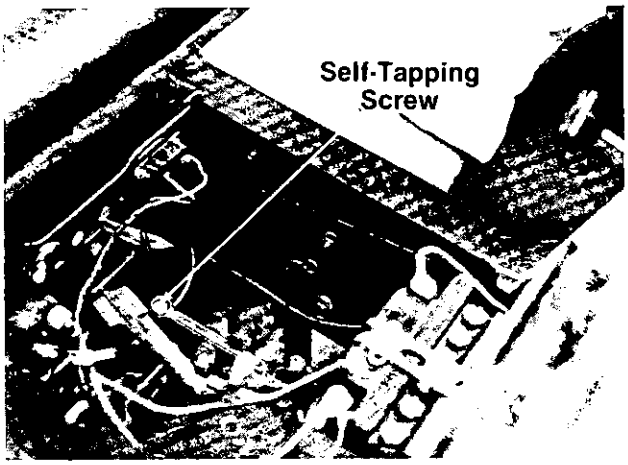


FIGURE 31.

6. Remove the transaxle shift lever by removing the hex bolt and belleville washer. Lift off the special "D" washer. See figure 32.

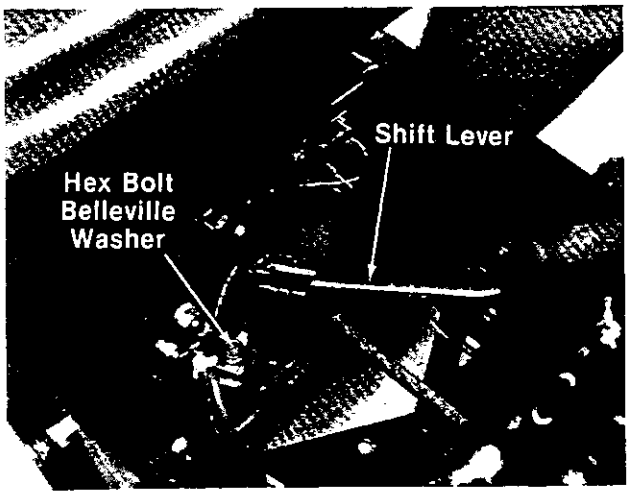


FIGURE 32.

7. Slide the transaxle belt guard back. Remove the belt from the engine pulley. Lift the belt up and over the transaxle pulley. See figure 33.

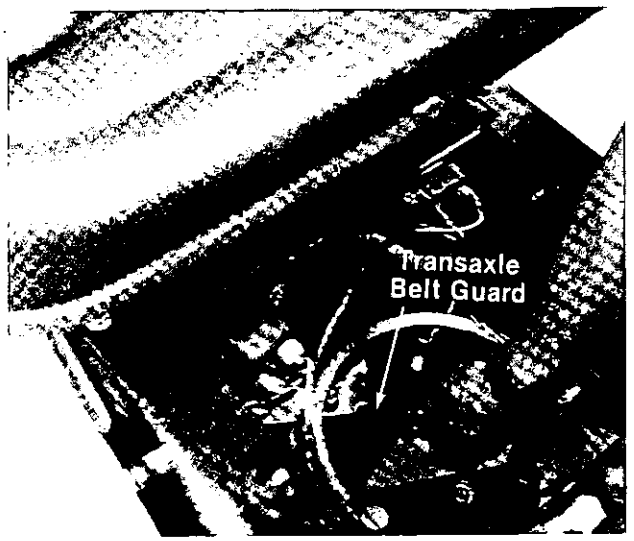


FIGURE 33.

8. Reassemble with a new belt, following instructions in reverse order.

IMPORTANT

The belt must be reassembled as shown in figure 34, with the back of the belt (flat side) against the idler pulley. The belt must be inside the pins. Failure to assemble the belt correctly will damage the belt.

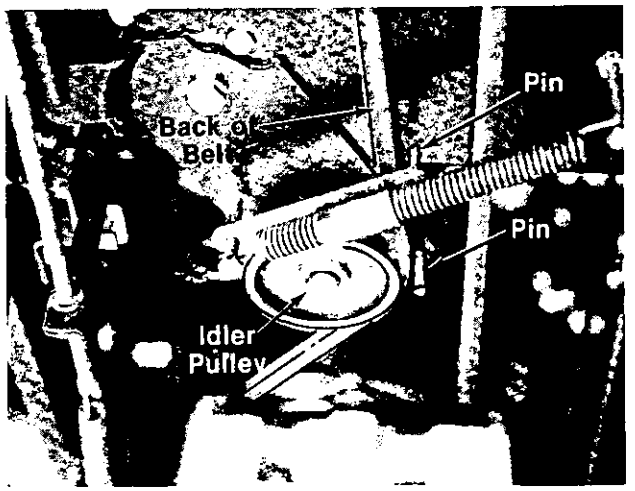


FIGURE 34.

BATTERY REMOVAL OR INSTALLATION

WARNING

When removing the battery, follow this order of disassembly to prevent the screwdriver from shorting against the frame.

1. Remove the Negative cable.
2. Remove the Positive cable.

To install a battery:

1. Attach the Positive cable.
2. Attach the Negative cable.

JUMP STARTING

1. Attach the first jumper cable from the Positive terminal of the good battery to the Positive terminal of the dead battery.
2. Attach the second jumper cable from the Negative terminal of the good battery to the FRAME OF THE UNIT WITH THE DEAD BATTERY.

Failure to use this starting procedure could cause sparking, and the gas in either battery could explode.

BATTERY MAINTENANCE

1. Check periodically (every two weeks or before and after charging) to be sure electrolyte level is above the lowest line on battery. Add only distilled water or a good quality drinking water. NEVER add additional acid or other chemicals to battery after initial activation.
2. The battery should be checked with a hydrometer after every 25 hours of operation. If the specific gravity is less than 1.225, remove battery and recharge.
3. Coat the terminals and exposed wiring with a thin coat of grease or petroleum jelly for longer service and protection against electrolyte corrosion.
4. The battery should be kept clean. Any deposits of acid should be neutralized with soda and water. Be careful not to get this solution in the cells.

BATTERY STORAGE

1. Charge battery using normal methods. NEVER store discharged battery as it will not recover.
2. When storing battery for extended periods, disconnect battery cables. Removing battery from unit is recommended.
3. Store in cold, dry place.
4. Recharge battery whenever the specific gravity is less than 1.225, before returning to service, or every two months, whichever occurs first.

COMMON CAUSES FOR BATTERY FAILURE ARE:

1. Overcharging
2. Undercharging
3. Lack of water
4. Loose holds downs and/or corroded connections
5. Excessive loads
6. Battery electrolyte substitutes
7. Freezing of electrolyte

NOTE

THESE FAILURES DO NOT CONSTITUTE WARRANTY.

INSTALLATION OF TIRE TO RIM

The following procedure must be followed when removing or installing a tire to the rim.

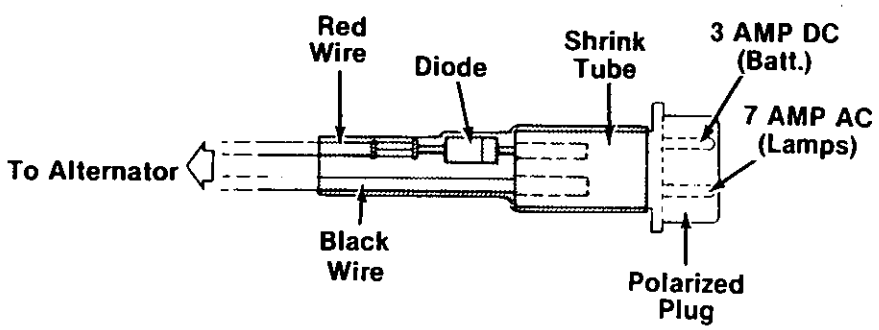
1. Lubricate the tire beads and rim flanges.
2. Do not exceed 30 p.s.i. when seating beads.
3. Adjust to recommended pressure after beads are seated.

OFF-SEASON STORAGE

If the machine is to be inoperative for a period longer than 30 days, prepare for storage as follows.

1. Clean the engine and the entire unit thoroughly.
2. Lubricate all lubrication points. Wipe the entire machine with an oiled rag to protect the surfaces.
3. Refer to the engine manual for correct engine storage instructions. The engine must be completely drained of fuel to prevent gum deposits from forming on essential carburetor parts, fuel lines and fuel tanks.
4. Refer to battery storage instructions in previous column.
5. Store unit in a clean, dry area.

TROUBLE SHOOTING CHART FOR ELECTRIC START MODELS

TROUBLE	LOOK FOR	REMEDY
Engine will not crank	Battery installed incorrectly	The battery must be installed with the negative, identified at the terminal post by (Neg, N or -), grounded. The positive (Pos, P or +) attaches to the large cable from the solenoid. The small red wire from the fuse holder or circuit breaker is also attached to the positive terminal.
	Blown fuse or circuit breaker	Replace fuse with 7½ amp. fuse ¼ x 1¼" lg. Circuit breaker will reset itself when it cools off. Fuses or circuit breakers seldom open or fail without a reason. The problem must be corrected. Check for loose connections in the fuse holder. Replace fuse holder if necessary. A dead short may be in the cranking or charging circuit where the insulation may have rubbed through and exposed the bare wire. Replace the wire or repair with electrican's tape if the wire strands have not been damaged. Note: Look for a wire pinched between body panels, burned by the exhaust pipe or muffler or rubbed against a moving part.
	Battery is dead or weak	Use a hydrometer to check the condition of the battery. The Specific Gravity (s.g.) should be 1.265 at 80°F. (1.215 s.g. minimum needed for cranking engine). The reason for the battery failing must be determined. (1) Defective battery. Battery will not accept or hold a full charge. (2) Short circuit. Check for grounded wire. (3) Charging system not working, either engine alternator or trickle charger. **Trickle Charger.** Check with multimeter. Charger 725-0578—input 120 V A.C., no load output 13.5 V D.C., rated load current 1 amp. Charger 725-0507—input 120 V A.C., no load output 17.4 V D.C., rated load current 1/2 amp. **Alternator** (dual or single circuit) The charging system is an alternator located under the flywheel. It is unregulated and rated 3 amp. at 3600 r.p.m. A diode (rectifier) is located in the output lead just before the wire harness plug on the engine side.  The diode changes A.C. to D.C. to charge the battery. A bad diode can either fail to charge the battery or discharge the battery if the alternator is shorted as well as the diode. To test: (1) Disconnect charger lead from the battery (small red wire). (2) Connect 12 V small test lamp between the 3 amp. D.C. charge lead and the positive terminal of the battery. (3) With the engine off, the lamp should not light. If it does, the diode and possibly the alternator should be replaced. (4) Start the engine. The lamp should light. If it does not,the alternator (stator) or lead wire is bad and should be replaced.
	Mechanical failure. (Wires and switches)	The interlock system includes two mechanical activated switches which are wired in series in the circuit used to energize the starter solenoid. While testing the interlock system, you will make the mower temporarily unsafe by permitting the engine to be started with the blade and clutch engaged. WARNING: While testing, disengage the clutch, shut off the blade control, set the parking brake and place the gear shift lever in neutral. Attach a wire (minimum 18 gauge) to the positive terminal of the battery and touch the other end to the small terminal on the solenoid. **If the engine does not crank:** (1) There is a loose connection or poor ground. (2) The solenoid may be bad. The solenoid can be checked by using a heavy wire (#8 gauge minimum) and jumping between the two large terminals. If the engine cranks, the solenoid is bad. (3) If the engine does not crank when you jump the solenoid, have the starter motor tested by an authorized engine dealer. If the engine does crank, the problem is with one of the safety switches, ignition switch or the wire between the fuse holder (or circuit breaker) and the small terminal on the solenoid. Note: Look for a poor connection at the switches or a defective switch. Replace if necessary.
Engine cranks but will not start	Throttle or choke not in starting position	Check owner's guide for correct position for throttle control and choke (if separate control) for starting.

TROUBLE SHOOTING CHART FOR ELECTRIC START MODELS

TROUBLE	LOOK FOR	REMEDY
	No spark to spark plug	Spark plug lead disconnected. Connect lead. Hold spark plug lead away from engine block about 1/8". Crank engine. There should be a spark. If not, have engine repaired at authorized engine service dealer. Faulty spark plug. To test, remove spark plug. Attach spark plug lead to spark plug. Ground the spark plug body against the engine block. Crank the engine. The spark plug should fire at the electrode. Replace if it does not.
	No fuel to the carburetor	Gasoline tank empty. Fill. Fuel valve shut off. Open valve. Valve is located either at the bottom of the fuel tank or on the carburetor. Fuel line plugged. Remove and clean.
	Air filter dirty	If the air cleaner is dirty, the engine may not start. Clean or replace as recommended by the engine manufacturer.
Engine smokes	Engine loses crankcase vacuum	Dipstick not seated or broken. Replace defective part. Engine breather defective. Replace.
Excessive vibration	Bent or damaged blade spindle	**Stop engine immediately.** Check all pulleys, blade spindles, blade adpaters, keys and bolts for tightness and damage. Tighten or replace any damaged parts.
	Bent blade	**Stop engine immediately.** Replace damaged blade. Only use original equipment blades.
Mower will not discharge grass or leaves uncut strips	Engine speed low Transmission selection Blades short or dull	Throttle must be set between 3/4 and full throttle. Use lower transmission gear. The slower your ground speed, the better the quality of cut. Sharpen or replace blades (uncut strip problem only).

NOTES

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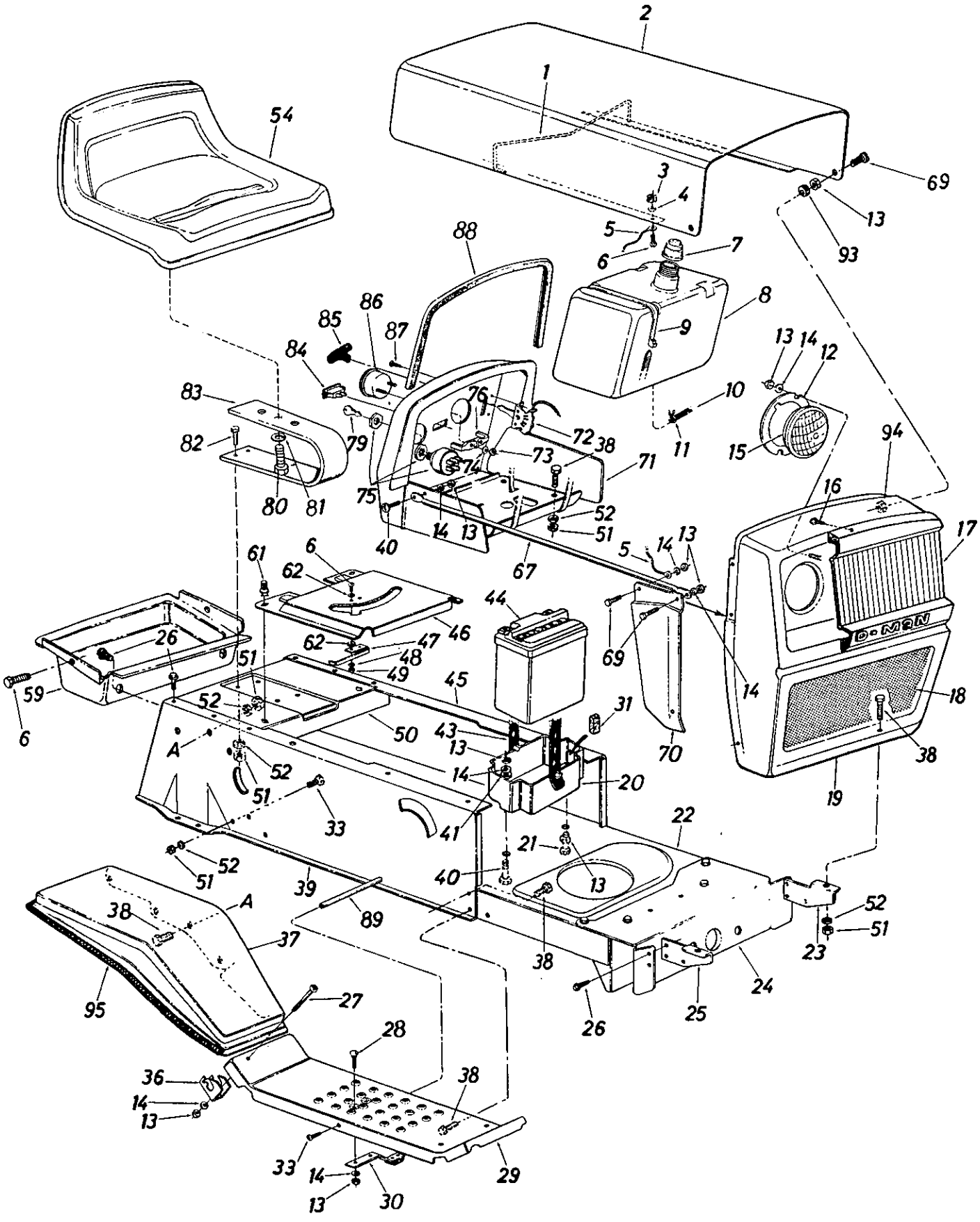
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13698

PARTS LIST FOR MODEL 13698 LAWN TRACTOR

REF. NO.	PART NO.	COLOR CODE	DESCRIPTION	NEW PART
1	732-0414		Hood Spring	
2	14665	—499	Hood	
3	712-0272		Hex Sems Nut #10-24 Thd.*	
4	736-0463		Fl-Wash. .281" I.D. x .62" O.D. x .051	
5	723-0302		Hood Stop 7" Lg.	
6	710-0473		Truss Hd. Scr. #10-24 x ½" Lg.*	
7	723-0155		Fuel Cap	
8	751-0172		Fuel Tank	
9	726-0153		Tie Strap	
10	751-0173		Fuel Line	
11	726-0207		Hose Clamp	
12	09960		Headlight Retainer	
13	712-0287		Hex Nut ¼-20 Thd.*	
14	736-0329		L-Wash. ¼" I.D.*	
15	725-0222		Headlight	
16	710-0200		Hex Wash. Hd. Self-Tap Scr. #8 x .50" Lg.	
17	731-0501		Headlight Bezel	
18	13730		Grille Screen	
19	14779		Grille Ass'y.	
20	731-0534		Battery Box	
21	710-0102		Hex Bolt ¼-20 x 2.50" Lg.*	
22	14606	—615	Lower Frame	
23	13863		Grille Mount Brkt.—L.H.	
24	14619		Front Pivot Brkt.	
25	13862		Grille Mount Brkt.—R.H.	
26	710-0726		Hex Wash. Hd. AB-Tap Scr. 5/16 x .75" Lg.	
27	710-0524		Truss Hd. Scr. ¼-20 x 1.75" Lg.*	
28	710-0134		Carriage Bolt ¼-20 x .62" Lg.*	
29	14604		Running Board (R.H. & L.H.)	
30	761-0169		Blade Brake Ass'y.	
31	722-0135		Foam Strip	
33	710-0323		Truss Mach. Scr. 5/16-18 x .75" Lg.*	
36	14671		Fender Clamp	
37	14666		Fender (R.H. & L.H.)	
38	710-0118		Hex Bolt 5/16-18 x .75" Lg.*	
39	14602		R.H. Side Frame	
40	710-0258		Hex Bolt ¼-20 x .62" Lg.*	
41	736-0173		Fl-Wash. .281 I.D. x .75" O.D.	
43	735-0204		Battery Hold Down	
44	725-0514		12-V Battery	
45	14603		L.H. Side Frame	
46	14618		Transmission Panel	
47	725-0759		Reverse Safety Switch	
48	736-0147		Ext. L-Wash. #10-24 Thd.*	
49	712-0121		Hex Nut #10-24 Thd.*	
50	14607		Hitch Plate	
51	712-0267		Hex Nut 5/16-18 Thd.*	
52	736-0119		L-Wash. 5/16" I.D.*	
54	757-0299		Seat Ass'y.	
59	731-0561		Tool Tray	
61	726-0151		Fastener	
62	736-0338		Fiber Wash.	
67	749-0517		Grille Support Rod (R.H. & L.H.)	
69	710-0255		Truss Hd. Scr. ¼-20 x .75" Lg.*	
70	14748		R.H.—Grille Side Panel	
	14749		L.H.—Grille Side Panel	
71	14620	—452	Dash Panel Ass'y.	
72	746-0449		Throttle Control Ass'y.	
73	—		Part of Ref. No. 86	
74	—		Part of Ref. No. 86	
75	725-0267		Ignition Switch	
76	—		Part of Ref. No. 86	
79	725-0201		Ignition Key	
80	710-0493		Hex Bolt ½-13 x 1.00" Lg. (2-Req'd.)	
81	736-0921		L-Wash. ½" I.D.*	
82	710-0376		Hex Bolt 5/16-18 x 1.00" Lg.*	
83	732-0354		Seat Spring	
84	725-0634		Light Switch	
85	722-0111		Throttle Control Knob	
86	725-0119		Ammeter	
87	710-0351		Truss Hd. Phil. Scr. #10 x .50" Lg.	
88	731-0511		Molding Strip 27" Lg.	
89	738-0526		Running Board Rod	
93	735-0144		Rubber Wash. ½" I.D. x 1.0 O.D. x .25"	
94	712-0324		Hex Sems Ins. L-Nut ¼-20 Thd.	
95	731-0516		Trim Strip	

*For faster service obtain standard nuts, bolts and washers locally. If these items cannot be obtained locally, order by part number and size as shown on parts list.

(499—Beige)
(615—Red)
(452—Equipment Black)

When ordering parts, if color or finish is important use the appropriate color code shown above. (e.g. Beige Finish—14665 (499).)

NOTE

Specifications subject to change without notice or obligation.

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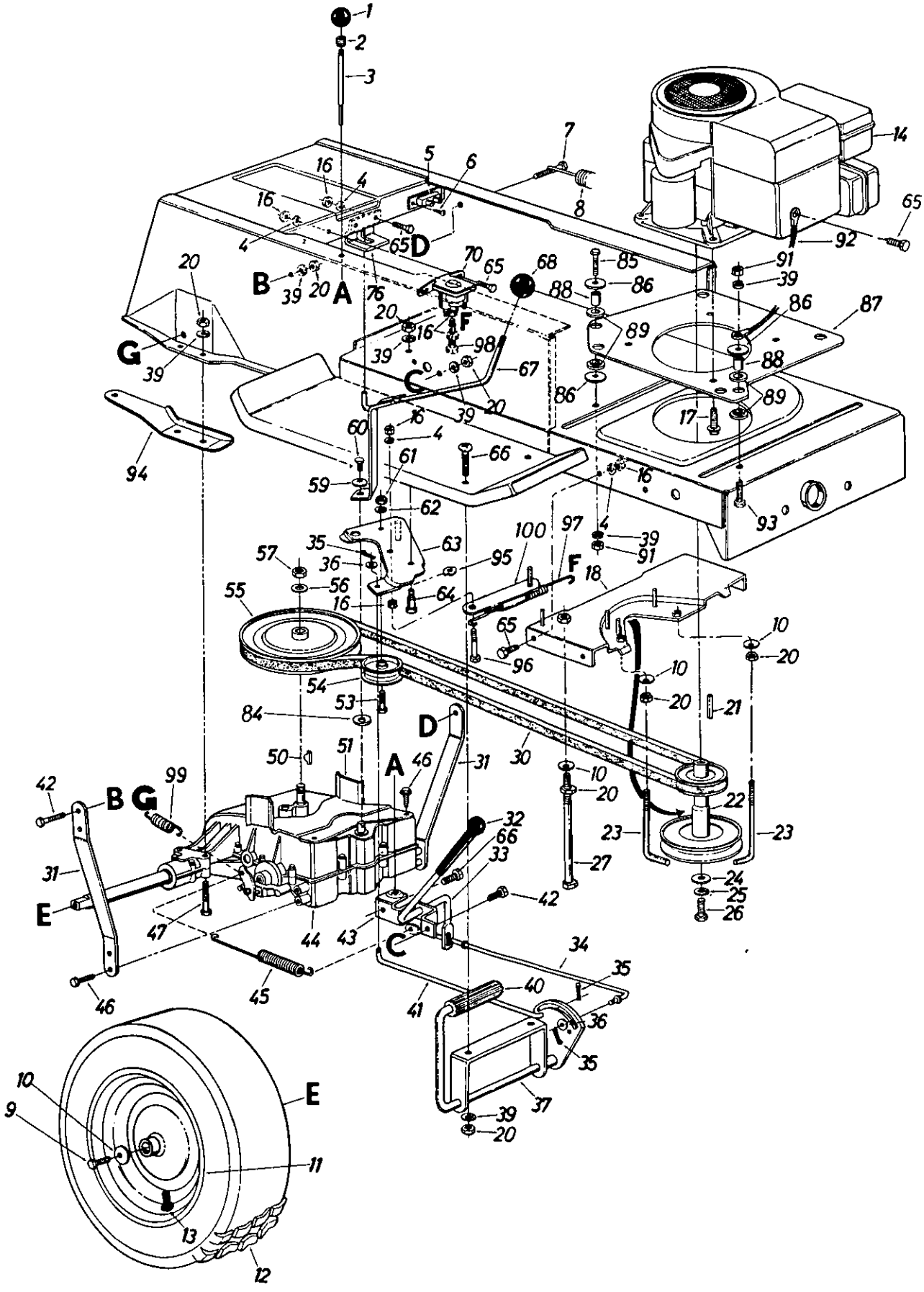

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PARTS LIST FOR MODEL 13698 LAWN TRACTOR

REF. NO.	PART NO.	COLOR CODE	DESCRIPTION	NEW PART
1	720-0187		Ball Knob 1.25" O.D. x ¼-20 Thd.	
2	732-0145		Compression Spring .30" O.D. x 1.00" Lg.	
3	711-0742		Brake Lockout Rod	
4	736-0329		L-Wash. ¼" I.D.*	
5	725-0459		Circuit Breaker	
6	710-0351		Truss Hd. Phil. Scr. #10 x ½" Lg.	
7	710-0528		Hex Bolt 5/16-18 x 1.25" Lg.	
8	732-0307		Ext. Spring .99" O.D. x 11.00" Lg.	
9	710-0627		Hex Bolt 5/16-24 x .75" Lg.*	
10	736-0242		Bell-Wash. 5/16" I.D.	
11	734-0603		Rear Wheel Rim Only	
12	734-0817		Rear Wheel Ass'y. Comp.	
13	734-0255		Air Valve (Service Only)	
14	—		Engine	
15	734-0542		Rear Wheel Hub Cap (Not Shown)	
16	712-0287		Hex Nut ¼-20 Thd.*	
17	710-0502		Hex Bolt 3/8-16 x 1.25" Lg.*	
18	14643		Belt Guard Brkt. Ass'y.	
20	712-0267		Hex Nut 5/16-18 Thd.*	
21	714-0114		Sq. Key ¼" x ¼" x 2.00" Lg.	
22	756-0373		Two Step Engine Pulley	
23	710-0836		"J"-Bolt 5/16-18 x 4.90" Lg.	
24	736-0322		Fl-Wash. 7/16" I.D. x 1.25" O.D. x .180	
25	736-0171		L-Wash. 7/16" I.D.*	
26	710-0757		Hex Bolt 7/16-20 x 1.50" Lg.	
27	710-0833		Hex Bolt 5/16-18 x 5.25" Lg.*	
30	754-0266		"V"-Belt "A" Glass 85" Lg. Bare Back	
31	14653		Transaxle Brace	
32	720-0143		Grip (Hand Brake)	
33	747-0386		Hill Holder Brake Handle	
34	747-0385		Brake Rod	
35	714-0111		Cotter Pin 3/32" Dia. x 1.00" Lg.*	
36	736-0204		Fl-Wash. .344" I.D. x .625" O.D.	
37	14623		Brake and Clutch Pedal Ass'y.	
39	736-0119		L-Wash. 5/16" I.D.*	
40	735-0196		Foot Pedal Pad	
41	747-0390		Clutch Rod	
42	710-0118		Hex Bolt 5/16-18 x .75" Lg.*	
43	14634		Brake Lock and Handle Support Brkt.	
44	—		Transaxle Complete	
45	732-0413		Ext. Spring .590" O.D. x 7.08" Lg.	
46	710-0604		Hex Wash. Hd. AB-Tap Scr. 5/16 x .62" Lg.	
47	710-0378		Hex Bolt 5/16-18 x 2.50" Lg.*	
50	714-0129		#4 Hi-Pro Key 3/32 x 5/8" Dia.	
51	14631		Transaxle Belt Keeper	
53	710-0344		Hex Bolt 3/8-16 x 1.50" Lg.*	
54	756-0225		Flat Idler Pulley 3/8" I.D. x 2.75 O.D.	
55	756-0374		Transaxle Pulley	
56	736-0921		L-Wash. ½" I.D.*	
57	712-0922		Hex Nut ½-20 Thd.*	
59	736-0270		Bell-Wash. .26" I.D. x .75" O.D.	
60	710-0513		Hex Bolt ¼-28 x .62" Lg.	
61	712-0798		Hex Nut 3/8-16 Thd.*	
62	736-0169		L-Wash. 3/8" I.D.*	
63	14656		Idler Brkt. Ass'y.	
64	738-0140		Shld. Scr. .437" Dia. x 1.80" Lg. (5/16-18)	
65	710-0258		Hex Bolt ¼-20 x .62" Lg.*	
66	710-0323		Truss Hd. Mach. 5/16-18 x .75" Lg.*	
67	14627		Shift Lever Ass'y.	
68	720-0165		Ball Knob 1.25" O.D. x 3/8-16 Thd.	
70	725-0771		Solenoid	
76	14630		Shift Lever Pivot Brkt.	
84	717-0234		Special Wash. 1.00" O.D.	
85	710-0158		Hex Bolt 5/16-24 x 1.25" Lg.*	
86	736-0343		Fl-Wash. 1.25" O.D. x .320" I.D.	
87	14791		Engine Mounting Plate	
88	750-0539		Spacer	
89	722-0153		Engine Mounting Grommet	
91	712-0123		Hex Nut 5/16-24 Thd.*	
92	725-0122		Electric Ground Wire	
93	710-0624		Hex Bolt 5/16-24 x 1.50" Lg.*	
94	14770		Transaxle Support Brkt.—R.H.	
	14769		Transaxle Support Brkt.—L.H. (Not Shown)	
95	736-0141		Wave Wash.	
96	710-0102		Hex Bolt ¼-20 x 2.50" Lg.*	
97	732-0384		Ext. Spring	
98	710-0102		Hex Bolt ¼-20 x 2.50" Lg.*	
99	732-0303		Brake Return Spring	
100	14794		Belt Guard	

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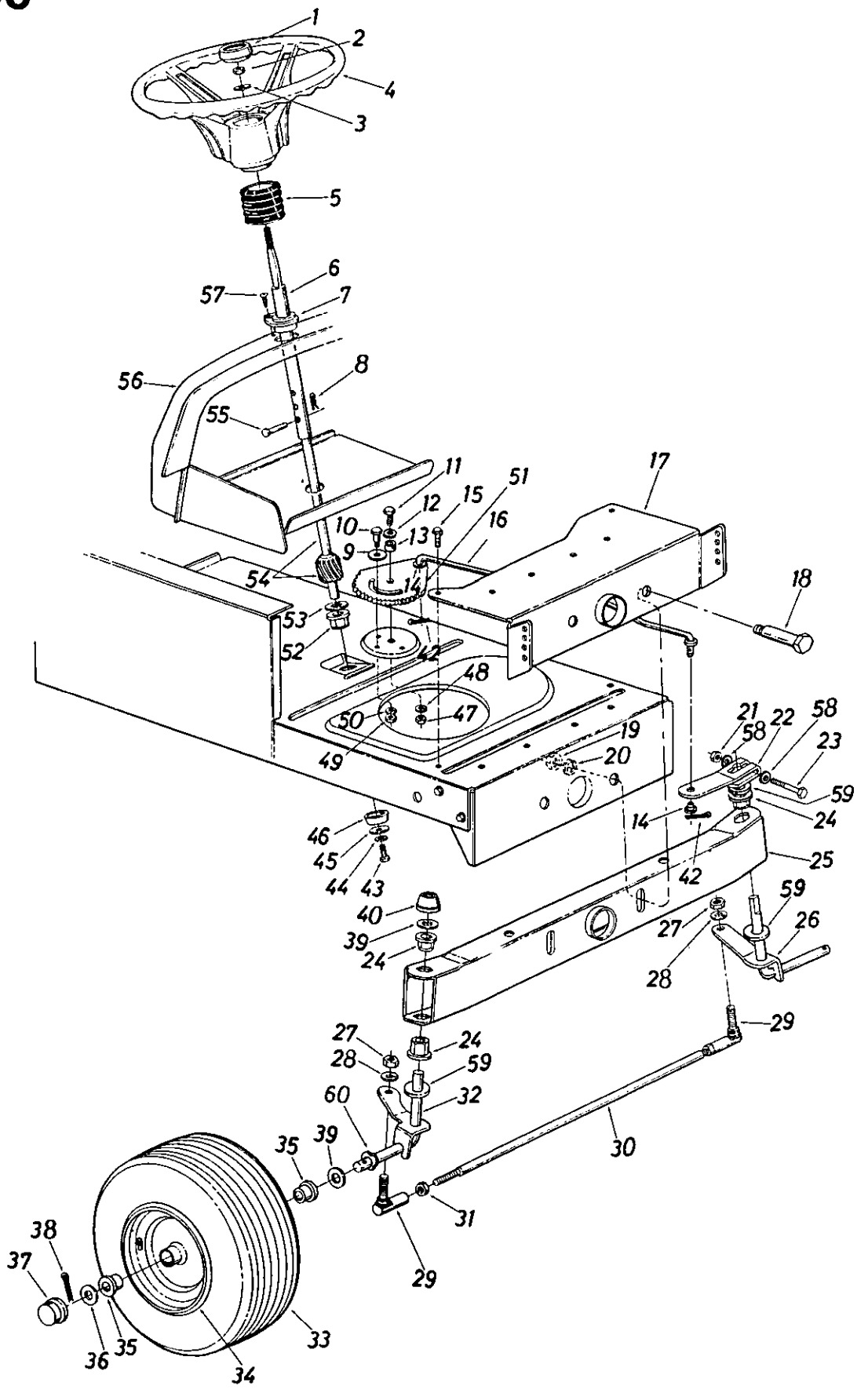
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PARTS LIST FOR MODEL 13698 LAWN TRACTOR

REF. NO.	PART NO.	COLOR CODE	DESCRIPTION	NEW PART
1	731-0220		Steering Wheel Cap	
2	712-0267		Hex Nut 5/16-18 Thd.*	
3	736-0242		Belleville Wash. .345" I.D.	
4	731-0356		Steering Wheel	
5	731-0559		Steering Bellow	
6	14775		Steering Column Ass'y.	
7	741-0356		Flange Bearing .890 I.D. x 1.36 O.D.	
8	714-0147		Internal Cotter Pin ¼" Dia.	
9	736-0319		Fl-Wash. .438" I.D. x 1.37" O.D.	
10	738-0141		Shoulder Bolt .437" Dia. x .35 Lg. 5/16-18 Thd.	
11	710-0152		Hex Bolt 3/8-24 x 1.0" Lg. (Grade 5)	
12	736-0206		Fl-Wash. .38" I.D. x 1.0" O.D.	
13	750-0535		Spacer .380" I.D. x .625" O.D. x .227	
14	731-0658		Bushing	
15	710-0726		Hex Wash. Hd. Self-Tap Scr.	
16	711-0691		Steering Drag Link	
17	14619	—615	Front Pivot Brkt.	
18	738-0527		Shoulder Bolt .498" Dia. x 2.04 Lg. 3/8-16 Thd.	
19	712-0798		Hex Nut 3/8-16 Thd.*	
20	736-0169		L-Wash. 3/8" I.D.*	
21	712-0237		Hex Cent. L-Nut 5/16-24 Thd.	
22	14611		Steering Arm Front Axle	
23	710-0772		Hex Bolt 5/16-24 x 2.00" Lg. (Grade 5)	
24	741-0225		Hex Flg. Brg. .634 I.D.	
25	14608		Pivot Bar Ass'y.	
26	14649		Front Axle Ass'y.—L.H.	
27	712-0241		Hex Nut 3/8-24 Thd.*	
28	736-0169		L-Wash. 3/8" I.D.*	
29	723-0156		Ball Joint 3/8-24 Thd.	
30	711-0613		Tie Rod	
31	712-0711		Hex Jam Nut 3/8-24 Thd.*	
32	14650		Front Axle Ass'y.—R.H.	
33	734-0998		Wheel Ass'y. Comp.	
34	734-0997		Front Wheel Rim Only	
35	741-0313		Bearing	
36	736-0285		Fl-Wash. .635 I.D. x 1.59" O.D.	
37	734-0541		Front Wheel Hub Cap	
38	714-0470		Cotter Pin 1/8" Dia. x 1.25" Lg.*	
39	736-0156		Fl-Wash. .635" I.D. x 1.20" O.D.	
40	726-0214		Push Cap 5/8" Dia. Rod	
42	714-0115		Cotter Pin 1/8" Dia. x 1.0" Lg.	
43	710-0538		Hex L-Bolt 5/16-18 x .62" Lg.*	
44	736-0119		L-Wash. 5/16" I.D.*	
45	736-0231		Fl-Wash. .344" I.D. x 1.25" O.D.	
46	750-0532		Spacer (Plastic)	
47	712-0241		Hex Nut 3/8-24 Thd.*	
48	736-0169		L-Wash. 3/8" I.D.*	
49	712-0267		Hex Nut 5/16-18 Thd.*	
50	736-0119		L-Wash. 5/16" I.D.*	
51	717-0468		Steering Gear Segment	
52	741-0225		Hex Flg. Brg. .634 I.D.	
53	736-0187		Fl-Wash. (Hardened)	
54	738-0522		Steering Shaft Lower	
55	711-0684		Clevis Pin ¼" Dia. x 1.00" Lg.	
56	14620		Dash Panel Ass'y.	
57	710-0837		Oval Hd. Cr.—Sunk Scr. #10 x 5/8" Lg.	
58	736-0242		Bell-Wash.	
59	736-0187		Fl-Wash. (Hardened)	
60	736-0174		Wave Washer	

(615—Red)

*For faster service obtain standard nuts, bolts and washers locally. If these items cannot be obtained locally, order by part number and size as shown on parts list.

When ordering parts, if color or finish is important use the appropriate color code shown above. (e.g. Red Finish—14619 (615).)

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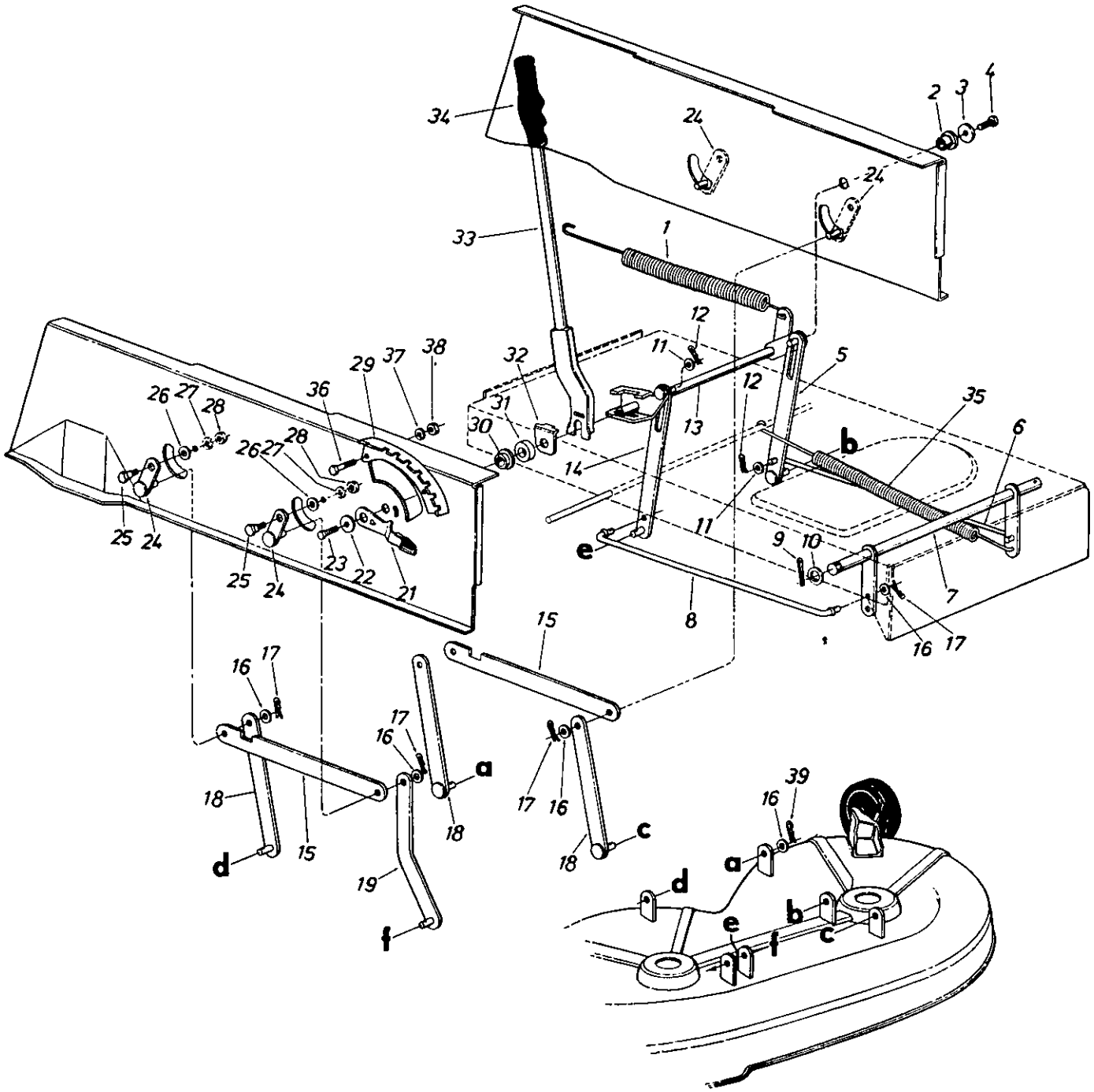
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PARTS LIST FOR MODEL 13698 LAWN TRACTOR

REF. NO.	PART NO.	COLOR CODE	DESCRIPTION	NEW PART
1	732-0307		Extension Spring .99" O.D. x 11.00" Lg.	
2	741-0313		Flange Bearing .634" I.D.	
3	736-0231		Fl-Wash. .344" I.D. x 1.125" O.D. x .125	
4	710-0604		Hex Wash. Hd. 5/16-18 x .62" Lg.	
5	14802		Link Deck Lift Ass'y.	
6	711-0738		Stabilizer Rod	
7	14647		Stabilizer Shaft Ass'y.	
8	711-0738		Stabilizer Rod	
9	714-0470		Cotter Pin 1/8" Dia. x 1¼" Lg.*	
10	736-0156		Fl-Wash. .635" I.D. x 1.12" O.D.	
11	736-0192		Fl-Wash. .531" I.D. x .940" O.D.	
12	714-0101		Inter. Cotter Pin .50" Dia.	
13	14641		Lift Shaft Ass'y.	
14	14802		Link Deck Lift Ass'y.	
15	09735		Connecting Rod	
16	736-0192		Fl-Wash. .531" I.D. x .940" O.D.	
17	714-0104		Inter. Cotter Pin For 3/8" Rod	
18	14804		Link Deck Hanger Ass'y.	
19	14800		Link Deck Hanger Ass'y. (Dog Leg)	
21	732-0412		Deck Lift—Down Stop	
22	736-0231		Fl-Wash. .344" I.D. x 1.125" O.D. x .125	
23	710-0604		Hex Wash. Hd. 5/16-18 x .62" Lg.	
24	09721		Pivot Link Ass'y.	
25	738-0140		Shld. Bolt .437" Dia. x .180" Lg. (5/16-18)	
26	736-0264		Fl-Wash. .344" I.D. x .62" O.D.	
27	736-0119		L-Wash. 5/16" I.D.*	
28	712-0267		Hex Nut 5/16-18 Thd.*	
29	14633		Index Brkt.	
30	736-0341		Flange Wash. .628" I.D. x 1.25" O.D.	
31	735-0216		Rubber Wash. 1.50" O.D. x .63" I.D. x .60	
32	14654		Retainer Washer—Lift Handle	
33	14645		Lift Handle Ass'y.	
34	720-0157		Grip (Lift Handle)	
35	732-0410		Extension Spring .99" O.D. x 13.25" Lg.	
36	710-0118		Hex Bolt 5/16-18 x .75" Lg.*	
37	736-0119		L-Wash. 5/16" I.D.*	
38	712-0267		Hex Nut 5/16-18 Thd.*	
39	714-0101		Inter. Cotter Pin	

*For faster service obtain standard nuts, bolts and washers locally. If these items cannot be obtained locally, order by part number and size as shown on parts list.

(615—Red)

When ordering parts, if color or finish is important use the appropriate color code shown above. (e.g. Red Finish—14619 (615).)

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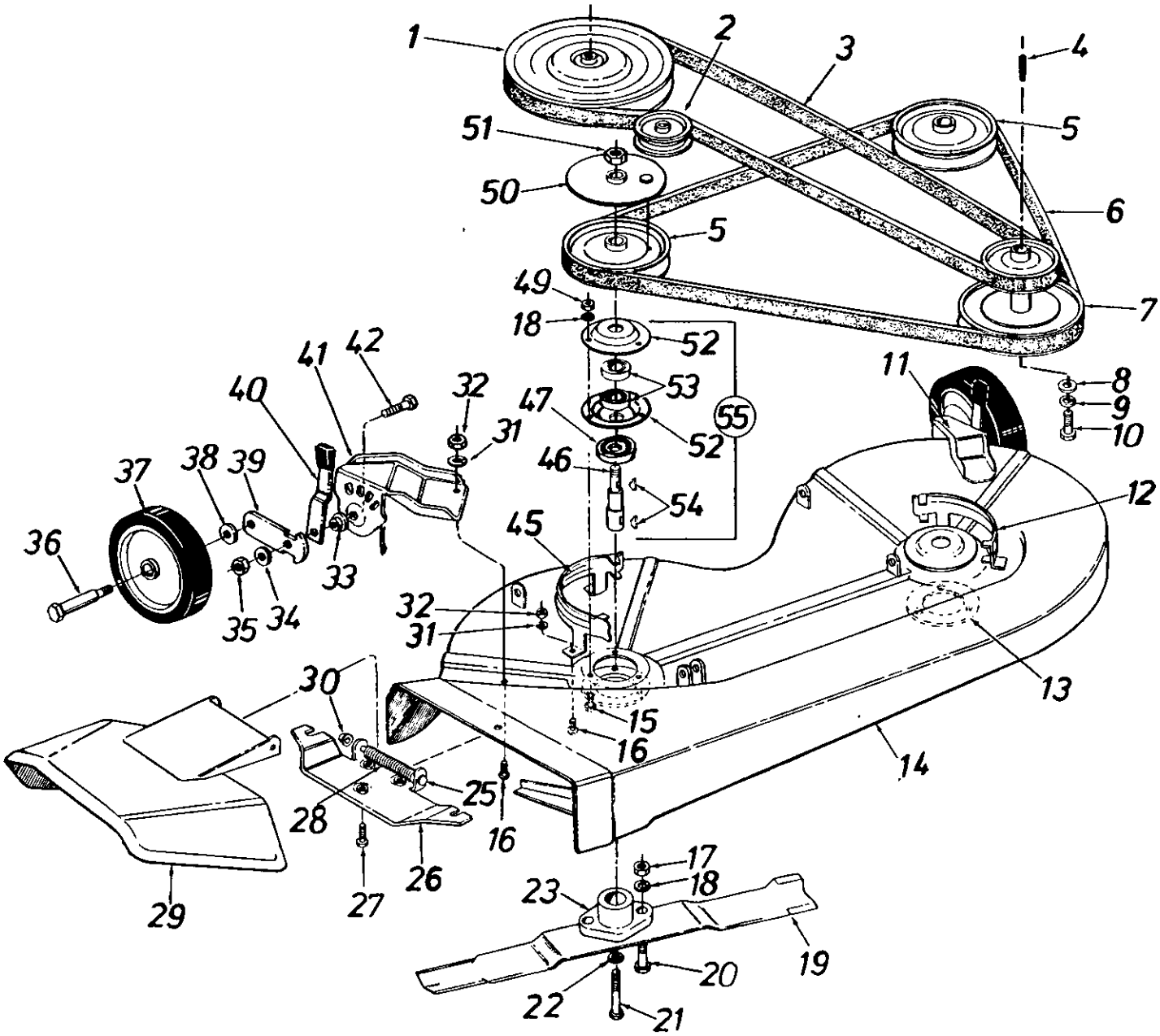
IMPORTANT

Belts listed by Part Number are of special construction and should be used when replacement is necessary. The dimensions and description given are for general reference only and belts purchased by description and dimension generally will only provide a temporary service.



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PARTS LIST FOR MODEL 13698 LAWN TRACTOR

REF. NO.	PART NO.	COLOR CODE	DESCRIPTION	NEW PART
1	756-0374		Transaxle Pulley	
2	756-0225		Flat Idler Pulley 3/8" I.D. x 2.75" O.D.	
3	754-0266		"V"-Belt "A" Glass 85" Lg. Bare Back	
4	714-0114		Sq. Key ¼" x ¼" x 2.0" Lg.	
5	756-0251		Pulley 4.75" O.D.	
6	754-0145		"V"-Belt 21/32 x 69" Lg. (38" Deck)	
7	756-0373		Two Step Engine Pulley	
8	736-0322		Fl-Wash. 7/16" I.D. x 1.25 O.D. x .180	
9	736-0171		L-Wash. 7/16" I.D.*	
10	710-0757		Hex Bolt 7/16-20 x 1.50" Lg.*	
11	09082		Wheel Brkt.—L.H.	
12	12672		Belt Guard—L.H.	
13	09164		Plate Deck Reinforcement	
14	14658		34" Deck Ass'y.	
	14662		38" Deck Ass'y.	
15	710-0322		Hex Sems Bolt 5/16-18 x 1.00" Lg.*	
16	710-0289		Hex Bolt ¼-20 x .50" Lg.*	
17	712-0123		Hex Nut 5/16-24 Thd.*	
18	736-0119		L-Wash. 5/16" I.D.*	
19	742-0122		19" Blade	
20	710-0117		Hex Bolt 5/16-24 x 1.00" Lg. (Grade 5)	
21	710-0459		Hex Bolt 3/8-24 x 1.50" Lg. (Grade 5)	
22	736-0217		L-Wash. 3/8" I.D. (Heavy Duty)	
23	10769		Blade Adapter Kit	
25	711-0571		Hinge Pin	
26	11396		Adapter Plate	
27	710-0599		Hex Wash. Self-Tap Scr. ¼-20 x .50" Lg.	
28	732-0261		Torsion Spring	
29	11633		Chute Cover Ass'y.—Comp.	
30	726-0106		Push Nut ¼" Rod	
31	736-0329		L-Wash. ¼" I.D.*	
32	712-0287		Hex Nut ¼-20 Thd.*	
33	748-0279		Shld. Spacer	
34	736-0219		Bell-Wash. .400" I.D. x 1.13"	
35	712-0181		Hex Top L-Nut 3/8-16 Thd.	
36	738-0373		Shld. Bolt .498" Dia. x 1.53"	
37	734-0973		Plastic Wheel 5.0" x 1.38"	
38	736-0105		Bell-Wash. .400" I.D. x .88"	
39	10937		Pivot Bar	
40	14082		Spring Lever Ass'y. w/Knob	
41	09080		Wheel Brkt.—R.H.	
42	710-0253		Hex Bolt 3/8-16 x 1.00" Lg.*	
45	12673		Belt Guard—R.H.	
46	711-0255		Blade Spindle	
47	13703		Bearing Shield	
49	712-0267		Hex Nut 5/16-18 Thd.*	
50	09322		Brake Disc	
51	712-0261		Hex Jam L-Nut 5/8-11 Thd.	
52	08253		Bearing Housing	
53	741-0919		Ball Bearing .787" I.D. x 1.85" O.D.	
54	714-0365		#6 Hi-Pro Key 5/32" x 5/8" Dia.	
55	09321		Blade Spindle Ass'y.	
	14777		38" Deck Ass'y. Comp. (Service Only)	

*For faster service obtain standard nuts, bolts and washers locally. If these items cannot be obtained locally, order by part number and size as shown on parts list.

(615—Red)

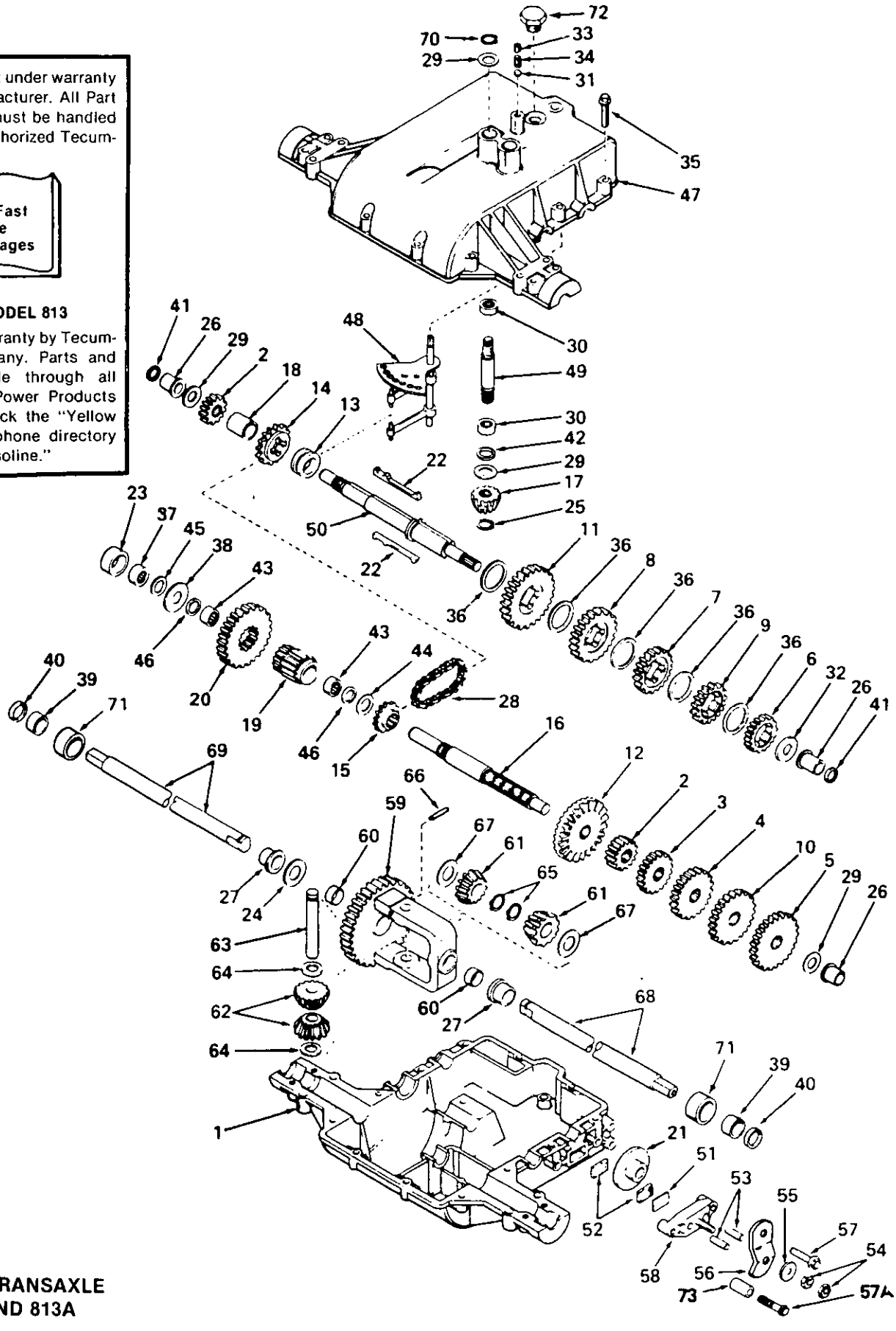
When ordering parts, if color or finish is important use the appropriate color code shown above. (e.g. Red Finish—14619 (615).)

13698

NOTE: This unit is not under warranty by the mower manufacturer. All Part Orders and Service must be handled through the local Authorized Tecumseh Service Dealer.

PEERLESS MODEL 813

This unit is under warranty by Tecumseh Products Company. Parts and Service are available through all Tecumseh, Lauson Power Products Service Dealers. Check the "Yellow Pages" of your telephone directory under "Engines—Gasoline."



FIVE-SPEED TRANSAXLE
MODEL 813 AND 813A
(717-0448)

13698

PARTS LIST FOR FIVE-SPEED TRANSAXLE MODELS 813 AND 813A (717-0448)

REF. NO.	PART NO.	DESCRIPTION
1	PE-770069A	Case, Transaxle
2	PE-778136	Gear, Spur (15 Teeth) (Model 813)
2	PE-778145	Gear, Spur (12 Teeth) (Model 813-A)
3	PE-778126	Gear, Spur (20 Teeth)
4	PE-778127	Gear, Spur (25 Teeth)
5	PE-778129	Gear, Spur (30 Teeth)
6	PE-778121A	Gear, Spur (20 Teeth)
7	PE-778123	Gear, Spur (25 Teeth)
8	PE-778124	Gear, Spur (30 Teeth)
9	PE-778122	Gear, Spur (22 Teeth)
10	PE-778128	Gear, Spur (28 Teeth)
11	PE-778125	Gear, Spur (35 Teeth) (Model 813)
11	PE-778146	Gear, Spur (37 Teeth) (Model 813-A)
12	PE-778137	Gear, Bevel (42 Teeth)
13	PE-784266	Collar, Shift
14	PE-786083	Sprocket (18 Teeth)
15	PE-786082	Sprocket (9 Teeth)
16	PE-776181	Shaft, Counter
17	PE-778113A	Bevel Pinion, Input
18	PE-786074	Spacer
19	PE-778138	Pinion, Output
20	PE-778139	Gear, Output
21	PE-790003	Disc, Brake
22	PE-792089A	Key
23	PE-786075	Spacer
24	PE-780001	Washer
25	PE-788040	Ring, Retaining
26	PE-780105	Bushing, Flanged
27	PE-780118	Bushing, Flanged
28	PE-786081	Chain, Roller (No. 41 Chain, 24 Links)
29	PE-780072	Washer, Thrust
30	PE-780086	Bearing, Needle
31	PE-792077	Ball, Steel
32	PE-780109	Washer, Thrust
33	PE-792078	Screw, Set, 3/8-16 x 3/8
34	PE-792079	Spring
35	PE-792073	Screw, Hex Hd. Thread Forming, 1/4-20 x 1-1/4
36	PE-780108	Washer, Thrust
37	PE-780111	Bearing, Needle
38	PE-780113	Washer, Flat
39	PE-530105	Bearing, Needle
40	PE-788042	Seal, Oil
41	PE-788051	Ring, Square Cut
42	PE-792001	Ring, Square Cut
43	PE-780112	Bearing, Needle
44	PE-780114	Washer, Flat
45	PE-788052	Ring, Square Cut
46	PE-788053	Ring, Square Cut
47	PE-772077A	Cover, Transaxle
48	PE-784290	Rod and Fork Ass'y., Shift
49	PE-776140	Shaft, Input
50	PE-776184	Shaft, Brake
51	PE-790007	Plate, Brake Pad
52	PE-790006	Pad, Brake
53	PE-786026	Pin, Dowel
54	PE-792075	Lock Nut, 5/16-24
55	PE-792076	Washer, Flat
56	PE-790004	Lever, Brake
57	PE-792073	Screw, Hex Hd. Thread Forming, 1/4-20 x 1-1/4
57A	PE-792085	Screw, Hex Hd. Thread Forming, 1/4-20 x 2-1/4
58	PE-790005	Holder, Brake Pad
59	PE-778053A	Gear Ass'y., Differential (Incl. 2 of No. 60)
60	PE-780064	Bushing
61	PE-778067	Gear, Bevel
62	PE-778068	Pinion, Bevel
63	PE-786034	Pin Drive
64	PE-780065	Washer, Thrust
65	PE-792018	Ring, Retaining
66	PE-792040	Pin, Roll
67	PE-780001	Washer, Thrust
68	PE-774420	Axle (14-7/8" Long)
69	PE-774419	Axle (13-3/4" Long)
70	PE-792035	Ring, Retaining
71	PE-786084	Spacer
72	PE-792074	Plug
73	PE-786066	Spacer

NOTE: This unit is not under warranty by the mower manufacturer. All Part Orders and Service must be handled through the local Authorized Tecumseh Service Dealer.

PEERLESS MODEL 813

This unit is under warranty by Tecumseh Products Company. Parts and Service are available through all Tecumseh, Lauson Power Products Service Dealers. Check the "Yellow Pages" of your telephone directory under "Engines—Gasoline."

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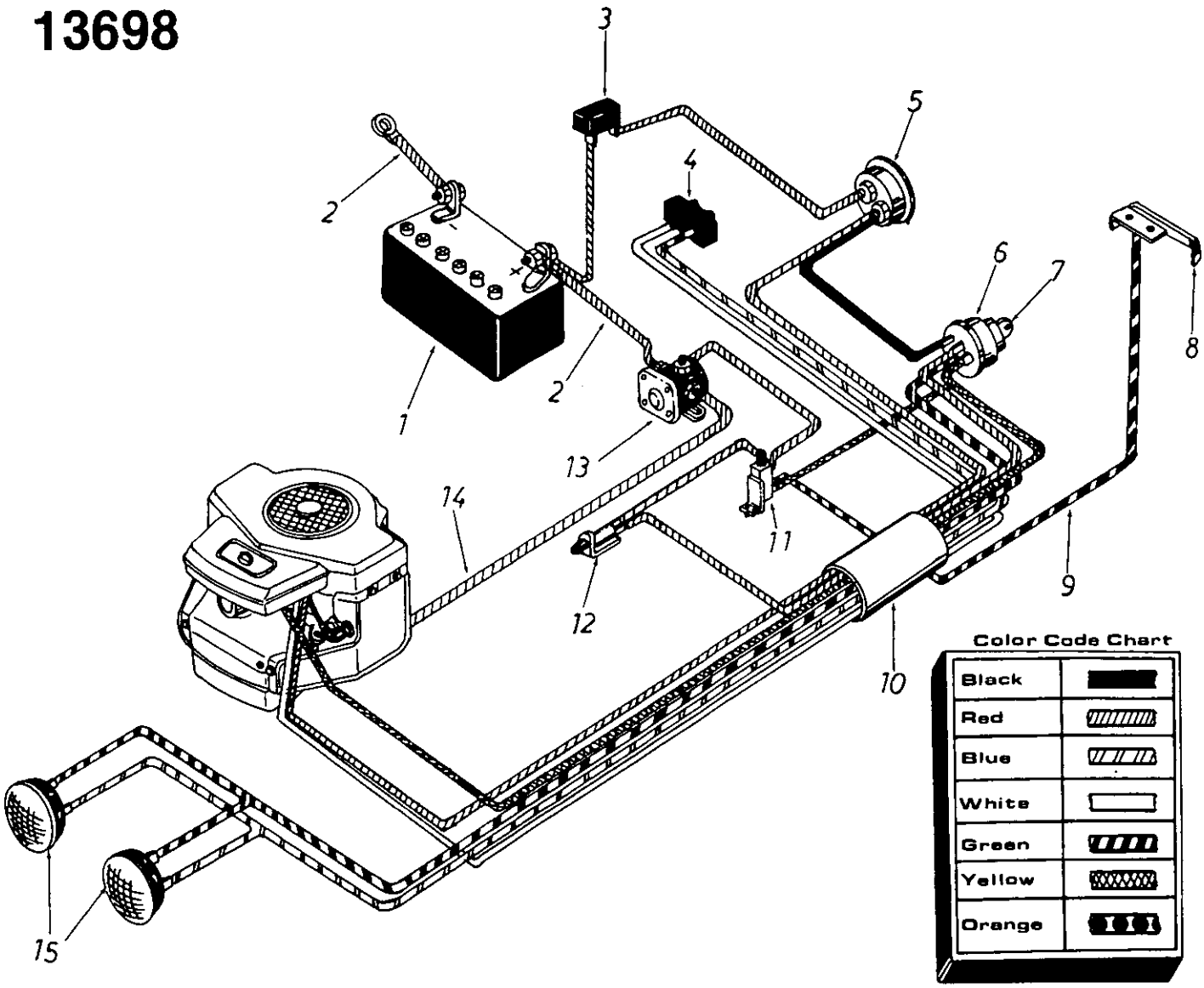

PARTS LIST FOR ELECTRICAL SYSTEM
MODEL 13698 LAWN TRACTOR

REF. NO.	PART NO.	DESCRIPTION	NEW PART
1	725-0514	Battery	
2	725-0221	Electric Wire	
3	725-0459	Circuit Breaker	
4	725-0634	Light Switch	
5	725-0119	Ammeter	
6	725-0267	Ignition Switch	
7	725-0201	Ignition Key	
8	725-0759	Reverse Safety Switch	
9	—	Electric Wire (Part of Ref. No. 10)	
10	725-0807	Wire Harness	
11	725-0803	Safety Switch	
12	725-0577	Safety Switch	
13	725-0771	Solenoid	
14	725-0562	Electric Wire	
15	725-0222	Headlight	

YaRD-MaN PARTS INFORMATION

POWER EQUIPMENT PARTS AND SERVICE

Parts and service for all YaRD-MaN manufactured power equipment are available through the authorized service distributors listed below. All orders should specify the model number of your unit, parts numbers, description of parts and the quantity of each part required. DO NOT SEND PARTS ORDER TO FACTORY. Dealers should contact their area distributors identified by state abbreviation below.

MD DE WA-DC N-VA	ADAMS EQUIPMENT 8001 Newell St. Silver Spring, MD 20910 (301) 585-1322
S-CA AZ	ALL SEASON EQUIPMENT 169 S. Hewes St. Orange, CA 92669 (714) 639-7272
NC SC	ALLISON-ERWIN CO. 2920 N. Tryon Street P.O. Box 32308 Charlotte, NC 28232 (704) 334-8621
ME N-NH	M. L. COFFIN 725 Broadway Bangor, ME 04401 (207) 942-8289
CT VT RI MA S-NH	CRANDALL-HICKS CO. Route 9 337 Boston Worcestpke Southboro, MA 01772 (617) 485-6300
Jackson County MI	FACTORY BRANCH COMPANY 440 East Prospect Jackson, MI 49203 (517) 783-2766
FL	FLORIDA OUTDOOR EQUIPMENT 4602 Parkway Commerce Blvd. Orlando, FL 32804 (305) 295-5010
AL FL-PNHDL	HART-GREER 900 N. 24th St. Birmingham, AL 35202 (205) 252-3182
GA	HENDERSON EQUIPMENT CO. Hwy. 19S-Glenwood Rd. P.O. Box 2054 Dublin, GA 31021 (912) 272-4900
W-E-MI N-W-OH	IDEAL MOWER SALES 811 Woodward Heights Ferndale, MI 48220 (313) 541-4660
N-CA	IMPOSSIBLE EQUIPMENT 1880 Enterprise P.O. Box 1016 W. Sacramento, CA 95691 (916) 371-9110
KS	THE LEE COMPANY 1648 W. Magnolia P.O. Box 480 Salina, KS 67401 (913) 825-6711
E-PA S-NJ	S.P. LUMMUS CO., INC. 800 Industrial Hwy. Pottstown, PA 19464 (215) 327-4920
WI UP-W-MI	MERCO CORP. 4080 N. Pt. Washington Rd. P.O. Box 12145 Milwaukee, WI 53212 (414) 961-3200
TN IN KY S-W-OH	MID-EAST POWER EQUIPMENT CO. 185 Lisle Road—P.O. Box 658 Lexington, KY 40586-0658 (606) 253-0688
N-NJ E-NY	NIEMEYER CORP. 1135 Phoenixville Pike P.O. Box 1477 West Chester, PA 19380 (215) 431-7200
N-E-OH	NORTH COAST DISTRIBUTING INC. 26565 Miles Road Warrensville Heights, OH 44128 (216) 292-6911
W-PA W-NY W-VA	NORTH COAST DISTRIBUTING INC. 79 N. Ind. Park Overlook Drive—Bldg 5 Sewickley, PA 15143 (412) 741-2006
MO E-KS	OZARK EQUIPMENT CO. Hwy. 63 & Black Street P.O. Box 784 Rolla, MO 65401 (314) 364-2180
HI	PACIFIC MACHINE-Light Industrial Div. 94-031 Farrington Hwy. Waipahu, HI 96797 (808) 671-6464
MT E-ID N-WY	PARKER-MONTANA CO. 2100—6th Ave. North P.O. Box 31555 Billings, MT 59101 (406) 245-6627
UT NV	POWERED PRODUCTS 485 North 500 West Bountiful, UT 84010 (801) 295-4141
IL IA	QUAD STATE POWER, INC. 3232 N—Route 23 P.O. Box 218 Ottawa, IL 61350 (815) 434-0055
C CA	QUALITY MOWER DISTRIBUTING 15100 Crenshaw Blvd. Gardena, CA 90249 (213) 324-1100
NE CO S E WY N W KS	STICKNEYS INC. 101 Main St. Sterling, CO 80751 (303) 522-2665
TX OK AR LA	TIMBERLAND SAW CO.—TIMSCO 1603 E. Houston—Box 1227 Marshall, TX 75670 (214) 935-5251
TX	WOODSON SALES CORP. 1720 N. Sylvania Ave. Fort Worth, TX 76111 (817) 838-6736
OR W ID	R. M. WADE & CO. 10025 S. W. Allen Blvd. Beaverton, OR 97005 (503) 641-1865
WA	R.M. WADE & CO. 3931 Leary Way Blvd. Seattle, WA 98107 (206) 632-8343
CANADA	MTD PRODUCTS CANADA 97 Kent Ave. Kitchener, Ontario Canada, N2G 4J1 (519) 579-5500
EXPORT	DRAKE AMERICA CORP. 477 Madison Ave. New York, NY 10022 (212) 758-5400

BRIGGS & STRATTON, TECUMSEH AND PEERLESS PARTS AND SERVICE

Briggs & Stratton, Tecumseh and Peerless parts and service should be handled by your nearest authorized engine service firm. Check the yellow pages of your telephone directory under the listing **Engine—Gasoline,** Briggs & Stratton or Tecumseh Lauson.

WARRANTY PARTS AND SERVICE POLICY

(0982)

The purpose of warranty is to protect the customer from defects in workmanship and materials, defects which are NOT detected at the time of manufacture. It does not provide for the unlimited and unrestricted replacement of parts. Use and maintenance are the responsibility of the customer. The manufacturer cannot assume responsibility for conditions over which it has no control. Simply put, if it's the manufacturer's fault, it's the manufacturer's responsibility; if it's the customer's fault, it's the customer's responsibility.

CLAIMS AGAINST THE MANUFACTURER'S WARRANTY INCLUDES:

1. **Replacement of Missing Parts** on new equipment.
2. **Replacement of Defective Parts** within the warranty period.
3. **Repair of Defects** within the warranty period.

All claims MUST be substantiated with the following information:

1. **Model Number** of unit involved.
2. **Date** unit was purchased or first put into service.
3. **Date** of failure—Date Repaired.
4. **Nature** of failure—Correction.